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HIGHER EDUCATION IN MARYLAND

A REPORT OF A SURVEY BY THE
AMERICAN COUNCIL ON EDUCATION
WITH
RECOMMENDATIONS OF THE
MARYLAND COMMISSION ON HIGHER
EDUCATION
1947

AMERICAN COUNCIL ON EDUCATION
WASHINGTON, D. C.

2

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1947

AMERICAN COUNCIL ON EDUCATION
WASHINGTON, D. C.

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MARYLAND COMMISSION ON HIGHER EDUCATION

Appointed by

Honorable Herbert R. O'Connor, Governor of Maryland

WILLIAM L. MARBURY, *Chairman*

T. HOWARD DUCKETT

CARL MURPHY

ARTHUR H. HAWKINS

MRS. JOHN C. SHAW

JOHN M. McFALL

HARVEY B. STONE

E. L. MILES

TALBOT T. SPEER

SURVEY STAFF

JOHN DALE RUSSELL, U.S. Office of Education, *Director*

WILLIAM E. ARNOLD, University of Pennsylvania

WILLIAM J. HAGGERTY, New Paltz State Teachers College

MARTIN D. JENKINS, Howard University

LEONARD V. KOOS, University of Chicago

ORVIN T. RICHARDSON, Ball State Teachers College

W. T. SANGER, Medical College of Virginia

LETTER OF TRANSMITTAL

TO THE GOVERNOR AND LEGISLATIVE COUNCIL:

The report of the Commission on Higher Education, appointed pursuant to Chapter 716 of the Acts of 1945, is submitted herewith.

Your Commission held its organization meeting on February 23, 1946, less than ten days after the appointment of its chairman. It was at once determined that expert help would be needed if the Commission were to perform its allotted task in a satisfactory manner. Diligent efforts were promptly made to get that help, and after protracted efforts the Commission finally succeeded in negotiating a contract with the American Council on Education to conduct a survey of higher education in Maryland and to furnish expert advice and assistance to the Commission in the preparation of its report. The American Council on Education chose Dean John Dale Russell, professor of education at the University of Chicago and now head of the Division of Higher Education of the United States Office of Education, to head the survey.

Dr. Russell's prior commitments did not permit him to meet the Commission until July 12, at which time plans for the survey were considered and agreed upon. The survey staff was then assembled and the work of investigation was begun. Much of the necessary information could not be obtained until after the beginning of the academic year in late September, so that it was not until early in December that the work of investigation was completed. The time in which to organize and study the material developed by the investigation has been all too brief.

In view of this record, no apologies are offered for the delay in submitting this report, but the Commission begs indulgence for any errors and omissions which haste may have brought about.

In addition to Dr. Russell, the Commission has had the assistance of Dr. Orvin T. Richardson, now Dean of Student Affairs at Ball State Teachers College in Indiana, who has borne a large part of the burden of the work of investigation

and who has acted as secretary of the Commission. We have also had the benefit of special investigations by Dr. W. T. Sanger, president of the Medical College of Virginia, who made a study of the needs of the State of Maryland in medical education; by Dr. Martin D. Jenkins, professor of education at Howard University, who made a special study of the field of Negro education; by Dr. Leonard V. Koos, professor of secondary education at the University of Chicago, who made a special study of the junior college situation; by Dr. William E. Arnold, professor of education at the University of Pennsylvania, who made a special study of the physical plants of the state-supported institutions; and by Dr. William J. Haggerty, president of the New Paltz State Teachers College in New York, who made a special study of teacher education. Their findings are embodied in the survey report which is attached to the recommendations of the Commission. Because of the length of the survey report, only a limited number of copies have been printed. Copies of the complete report of the Commission and of the survey staff, bound in a single volume, may be obtained from the American Council on Education, 744 Jackson Place, Washington, D.C.

Your Commission wishes to express its grateful appreciation to Dr. Russell and his staff, and particularly to Dr. Richardson who has carried the heavy load of detail, for their excellent survey. They have made a contribution to the State of Maryland which will prove to be of lasting value. While Dr. Russell and his staff are in no way responsible for the recommendations of the Commission, their advice has been invaluable.

MARYLAND COMMISSION ON HIGHER EDUCATION

T. HOWARD DUCKETT

CARL MURPHY

ARTHUR H. HAWKINS

MRS. JOHN C. SHAW

JOHN M. MCFALL

HARVEY B. STONE

E. L. MILES

TALBOT T. SPEER

WILLIAM L. MARBURY

Chairman

February 1, 1947

AMERICAN COUNCIL ON EDUCATION
744 JACKSON PLACE
WASHINGTON 6, D. C.

4-5-6
January 2, 1947

TO THE MARYLAND COMMISSION ON HIGHER EDUCATION:

Herewith there is transmitted to you the factual report of a survey of higher education in Maryland, made in accordance with your instructions. As agreed at the time this survey was planned, the text of this report is limited to the presentation of pertinent facts; it does not follow these facts with a series of recommendations for improvements in the present situation. The making of such recommendations, as agreed when this survey was ordered, is a function of the Maryland Commission on Higher Education rather than of the survey staff.

This factual report is transmitted with the hope that its contents will be of use to you in outlining suggestions for strengthening the services of the state to its young people who are interested in opportunities for education beyond the secondary school.

Respectfully submitted,

GEORGE F. ZOOK, *President*
American Council on Education

JOHN DALE RUSSELL, *Director*
Survey Staff

FOREWORD

The State Legislature of Maryland in 1945 enacted a bill creating the Maryland Commission on Higher Education and outlining its duties. The members of the Commission were appointed by Governor Herbert R. O'Connor in February 1946, and the Commission was promptly organized to carry out its assignment. The Commission, after studying its problem briefly, turned for advice to the American Council on Education and eventually entered into a contract with that organization to conduct a survey of higher education in the State of Maryland. Dr. John Dale Russell was suggested by the American Council on Education and approved by the Maryland Commission on Higher Education as the director of the survey. Mr. Russell was at that time professor of education at the University of Chicago; he has since become the director of the Division of Higher Education in the United States Office of Education, Washington, D.C. .

It was agreed at the outset that the Commission itself would be responsible for the recommendations to be made to the governor and the legislature. The function of the survey was by agreement limited to the collection, interpretation, and presentation of facts that would assist the Commission in arriving at sound recommendations concerning the state's policy in higher education.

The Director of the survey and Dr. George F. Zook, president of the American Council on Education, met with the Maryland Commission on Higher Education in July 1946 at which time the general plans for the survey were discussed. Subsequent to this meeting the Director prepared a list of questions indicating the kinds of facts that would be useful in appraising the status of higher education in Maryland. This list of questions was considered by the Commission and approved as an outline controlling the collection of data.

Information for the survey was collected by four processes: (1) a careful search of the available and pertinent published materials; (2) an extensive series of information schedules filled out by the colleges and universities of the

12 state; (3) personal visits to the state-supported institutions of higher education; (4) conferences with educational and civic leaders in the state.

The collection of information directly from institutions could not be initiated until after the opening of the autumn term in 1946. The work of the survey, therefore, has been carried on under severe limitations of time, inasmuch as the report was needed as a basis of action by the legislature early in the winter of 1947.

Because of other commitments, the Director of the survey could give only part-time to the work in Maryland. Dr. Orvin T. Richardson was selected as assistant to the director of the survey; he devoted full time to the general direction of the survey office and the compilation of data, beginning in August 1946. Since the completion of his work on the survey, Dr. Richardson has become Dean of Student Affairs at Ball State Teachers College, Muncie, Indiana.

Special consultants were appointed to make studies of particular problems. These consultants and their problems were as follows: Dr. William E. Arnold, professor of education, University of Pennsylvania, special consultant on physical plant; Dr. William J. Haggerty, president of the New Paltz State Teachers College, New York, special consultant on teacher education; Dr. Martin D. Jenkins, professor of education, Howard University, Washington, D.C., special consultant on problems of higher education for Negroes in Maryland; Dr. Leonard V. Koos, professor of secondary education, University of Chicago, special consultant on junior college education; Dr. William T. Sanger, president, Medical College of Virginia, Richmond, Virginia, special consultant on medical education. Mr. D. M. Mackenzie, dean of Blackburn College, in Illinois, assisted in making certain statistical tabulations. The reports submitted by the special consultants have been incorporated into the text of the survey report at the appropriate points. Wherever the specialist's report is quoted in the form in which it was submitted, its author is indicated by a footnote to the heading of the section. Dr. Richardson

has been responsible for the preparation of most of the tables appearing in this report.

The officials of the institutions of higher education in Maryland cooperated to the best of their ability in the work of the survey. The requests for information placed a heavy burden on the administrative staff members at a time when many of them were badly pressed by the adjustments necessary to care for increased enrollments at the beginning of the autumn term. In every case the survey staff members were courteously received at the institutions. The survey staff wishes to record its grateful appreciation of the attitude and cooperation of the institutional officials in this work.

Because of the pressure of time under which this report has been prepared, it has not been possible to check each item of fact for strict accuracy. Reliance has necessarily had to be placed on the accuracy of information obtained from the institutions through the data schedules and the personal visits. Time has not permitted the resubmitting of the tabulations to the institutions for checking. Such tests as could be made indicated that the data are sufficiently accurate and reliable for the kinds of conclusions that have been drawn from them.

Accommodations for the office of the survey staff were provided through the cooperation of the Maryland State Planning Commission, which shared its already crowded quarters in order to provide desk room and working space for this survey. The members of the survey staff gratefully record their appreciation of the many courtesies extended by Mr. I. Alvin Pasarew, director of the Maryland State Planning Commission and the members of his staff.

Recognition is also due to Colonel Beverly Ober, Superintendent of State Police, who provided transportation for the survey staff members in the visits to the various institutions. This arrangement saved the state a considerable amount of traveling expense and effected an equally important saving of time in the field work of the survey. The courtesy of Colonel Ober and his efficient personnel in the state police system is greatly appreciated.

By no means is it possible to mention all of those who contributed effectively to the work of the survey. Special recognition, however, is due to Mrs. Mary A. Kirwan, who served as secretary to the survey staff from the beginning of its organization. It was only through her faithful, efficient, and diligent assistance that the survey staff was able to produce this report within the time limits under which it has operated.

The reader who is familiar with surveys of higher education will note that the present report differs considerably from most of those that have been made in recent years. The decision to separate the fact-finding function from the responsibility for making recommendations has given a distinctly novel turn to the Maryland survey of 1946-47. In this survey the making of recommendations is the responsibility of the representative citizens of the state who hold membership on the Commission on Higher Education. It is to them, rather than to some outside group, that the State of Maryland must now look for guidance in the solution of the pressing problems that confront the development of an adequate program of higher education.

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Part I

A REPORT OF A SURVEY MADE BY THE
AMERICAN COUNCIL ON EDUCATION

I. THE NEEDS OF MARYLAND FOR HIGHER EDUCATION

✓
The most precious resource of any state is the intelligence of its population. The prosperity of any people depends, in part, upon the supply of natural resources with which the land is endowed, but in larger measure upon the extent to which the intellectual capacities of the population are developed along lines that contribute to the general welfare. The natural resources of what is now the United States were greater in the years before 1500 than they are at present, but at that time the area supported only a comparatively small population of Indians, whose plane of living was far below that which would today be considered a minimum comfort level. With the coming of the European colonists human intellectual power came increasingly to be developed and applied to the solution of problems. As a result, economic productivity expanded, to the point where the United States now supports a population of 140,000,000 at a level of comfort that was undreamed of a few centuries ago.

Expenditures for education are an investment that yields magnificent returns to the social group as a whole. The more a state or country can put into the development of the intellectual resources of its population, the greater the returns will be in future prosperity and security.

Education in the United States is organized under the control of the various states. To a certain extent the states compete with one another in the development of educational facilities. If a state falls behind the others in the provision of education, it denies to its young people the privilege of the fullest participation in future opportunities. Such a state also is likely to have relatively few of its own citizens equipped to make effective use of its natural resources, leaving these resources to be exploited by outsiders from states where better educational facilities are provided.

The needs of a state for higher education are broadly determined by two factors. The first is the number of young people who want higher education and who may reasonably be expected to enter upon that level of preparation. The

second is the number of educated persons needed to carry on the activities essential to the welfare of the social group. From one point of view the state can be said to have an obligation to educate its youth merely because they reside within the boundaries of the state. The extent to which higher education is a "right" that should be available to all properly qualified young people has been in the past a debatable question in the United States, but increasingly in recent decades an affirmative answer has been given. Most of the states now recognize that the provision of higher education for all properly qualified persons who wish to have it is an obligation resting upon the state government. From another point of view, the state that fails to furnish adequate opportunities for higher education is failing also to provide itself with the kind of effective service that will contribute to its greatest welfare. It is like a man who shivers with the cold all winter even though he has a forest of firewood in his back yard, or like a man who remains hungry when plenty of good food is available in return for a little energy expended in collecting it.

An important factor which limits the total contribution of the state to the support of higher education is its financial resources. Obviously the appropriations for higher education must not get out of balance with those applied to other needed public services. The amount that can be devoted to public higher education, moreover, is, in part, conditioned by the system of taxation. An even more important conditioning factor is the attitude of the people toward the provision of higher education. In the modern economic order people seem to be able to afford almost any service when they want it badly enough. For example, in a state like Maryland, where annually more than \$100,000,000 is bet at the race tracks, it would seem economically possible, if the people were willing, to put as much money into higher education as is bet on horse races. It seems, therefore, that at present the more important limits on the amount that can be spent for public higher education are those arising from the attitude of the people rather than from any basic shortage of economic resources.

Facilities for higher education are maintained through institutions known as colleges and universities. Such an institution, especially after it has been operated successfully in the public interest for some years, tends to become very firmly established. The members of the staff and the citizens of the community tend to look on the continuation of the institution as a goal in itself, irrespective of the current needs of the state or of the significance of the services that the institution renders. Such an attitude may often run counter to the best interests of the state, which should constantly seek the most economical methods of providing the best possible distribution of higher education to its citizens. Although the existing institutional pattern cannot be ignored in appraising the services of the state in higher education, the statesmanlike development of plans must not consider the welfare of individual institutions as a primary or important purpose of higher education. Instead, the institutional organization must be constantly adjusted to the needs of the state. This may at times require the establishment of new institutions, modification in the pattern of existing institutions, or even the complete discontinuance of some that can no longer contribute effectively to meeting state needs.

As a background for the consideration of higher education in Maryland, this survey must review first of all certain basic facts regarding the state. Its population, the economic and industrial conditions, the nature and extent of the public school system, the number of young people prepared for entrance to college, the trends of college enrollments, and the needs of the state for the services of people who have been prepared in institutions of higher education are matters to which attention will be given in the remainder of this chapter.

THE POPULATION OF THE STATE

In 1940 Maryland had a population of 1,821,244, according to the *United States Census*; of this number 78.9 percent were native-born white, 4.5 percent were foreign-born white, and 16.6 percent were Negro. Table 1 shows the growth

since 1860 in the total population in Maryland and in the United States as a whole.

The population of Maryland has steadily increased during the eighty years shown in Table 1. The rate of increase for Maryland, however, was less than that for the United States as a whole up until 1930. Between 1930 and 1940 the population in Maryland increased at a more rapid rate than the population of the entire country. There is some indication, from estimates of population recently made by the Bureau

TABLE 1*

GROWTH OF POPULATION, UNITED STATES AND MARYLAND 1860-1940

CENSUS YEAR	UNITED STATES		MARYLAND	
	Population	Percentage of Increase over Preceding Census	Population	Percentage of Increase over Preceding Census
1860.....	31,443,321	35.6	687,049	17.8
1870.....	38,558,371	22.6	780,894	13.7
1880.....	50,155,783	30.1	934,943	19.7
1890.....	62,947,714	25.5	1,042,390	11.5
1900.....	75,994,575	20.7	1,188,044	14.0
1910.....	91,972,266	21.0	1,295,346	9.0
1920.....	105,710,620	14.9	1,449,661	11.9
1930.....	122,755,046	16.1	1,631,526	12.5
1940.....	131,669,275	7.2	1,821,244	11.6

* Source: U.S. Bureau of the Census, *Estimated Population of the United States*.

of the Census, that Maryland population has continued to increase more rapidly than that of the country as a whole since 1940.

Chesapeake Bay divides the State of Maryland and separates the region known as the Eastern Shore from the rest of the state. The separation is not only geographical but tends also to make the Eastern Shore a distinct political unit with its own interests and own philosophy of life. The geographical separation of the Eastern Shore is a significant feature which must be taken into account in appraising and planning the service of the state in higher education. The part of the state that lies west of Chesapeake Bay is generally recognized as comprising three main sections, the western, the central, and southern parts of the state. These divisions

are not nearly so clear-cut as that of the Eastern Shore, although the counties in the west, comprising mountainous regions, are fairly sharply separated from the central part of the state.

The distribution of the Maryland population among the various counties for 1930 and 1940, together with the Bureau of Census estimate of 1945 are shown in Table 2. Table 3 shows the white and Negro population according to counties in 1940.

TABLE 2*
TOTAL POPULATION OF MARYLAND ACCORDING TO COUNTY
1930, 1940, and 1945

County	1930	1940	1945
Baltimore City.....	804,874	859,100	927,941
Baltimore County.....	124,565	155,825	202,425
Allegany.....	70,098	86,973	81,302
Washington.....	65,882	68,838	69,890
Prince George's.....	60,095	89,490	117,625
Anne Arundel.....	55,167	68,375	77,070
Frederick.....	54,440	57,312	51,774
Montgomery.....	49,206	83,912	104,155
Carroll.....	35,978	39,054	39,399
Harford.....	31,603	35,060	42,890
Wicomico.....	31,229	34,530	32,960
Dorchester.....	26,813	28,006	24,264
Cecil.....	25,827	26,407	32,055
Somerset.....	23,382	20,965	17,269
Worcester.....	21,624	21,245	19,201
Garrett.....	19,908	21,981	18,534
Talbot.....	18,583	18,784	16,190
Caroline.....	17,387	17,549	16,047
Howard.....	16,169	17,175	18,481
Charles.....	16,166	17,612	19,784
St. Mary's.....	15,189	14,626	17,877
Queen Anne's.....	14,571	14,476	12,194
Kent.....	14,242	13,465	13,071
Calvert.....	9,528	10,484	10,549
Total, State of Maryland.....	1,631,526	1,821,244	1,982,947

* Authority: U.S. Bureau of Census.

The chief increases in population between 1930 and 1940 occurred in the counties having the larger populations. Some of the smaller counties actually decreased in population during the decade of the '30's.

The chief center of population in the state is Baltimore, which, with its suburbs in Baltimore County, contains slightly

more than half of the total population of the state. Cumberland, with a population of 39,483, and Hagerstown, with 32,491, were the only other cities in the state having more than 16,000 inhabitants in 1940. There is a considerable concentration of suburban population around the District of Columbia in Montgomery and Prince George's counties.

TABLE 3*
POPULATION OF MARYLAND ACCORDING TO RACE, 1940

County	White	Negro	Other	Total	Percentage White	Percentage Negro
Allegany.....	85,651	1,320	2	86,973	98.5	1.5
Anne Arundel.....	50,524	17,763	88	68,375	73.9	26.1
Baltimore.....	145,295	10,504	26	155,825	93.2	6.8
Calvert.....	5,604	4,880	.....	10,484	53.5	46.5
Caroline.....	14,102	3,442	5	17,549	80.4	19.6
Carroll.....	36,973	2,078	3	39,054	94.7	5.3
Cecil.....	24,051	2,347	9	26,407	91.1	8.9
Charles.....	10,384	7,228	.....	17,612	59.0	41.0
Dorchester.....	19,917	8,086	3	28,006	71.1	28.9
Frederick.....	52,607	4,697	8	57,312	91.8	8.2
Garrett.....	21,976	5	.....	21,981	99.97	00.3
Harford.....	31,076	3,981	3	35,060	88.6	11.4
Howard.....	14,369	2,804	2	17,175	83.7	16.3
Kent.....	9,404	4,057	4	13,465	69.8	30.2
Montgomery.....	74,986	8,889	37	83,912	89.4	10.6
Prince George's.....	73,217	16,224	49	89,490	81.8	18.2
Queen Anne's.....	10,129	4,346	1	14,476	70.0	30.0
St. Mary's.....	9,901	4,724	1	14,626	67.7	32.3
Somerset.....	13,904	7,061	.....	20,965	66.3	33.7
Talbot.....	13,048	5,732	4	18,784	69.5	30.5
Washington.....	67,048	1,774	16	68,838	97.4	2.6
Wicomico.....	27,035	7,477	18	34,530	78.3	21.7
Worcester.....	14,575	6,669	1	21,245	68.6	31.4
Baltimore City.....	692,705	165,843	552	859,100	80.7	19.3
Total, State of Maryland.....	1,518,481	301,931	832	1,821,244	83.4	16.6

* Source: U.S. Census, 1940.

The Negro population is distributed very unequally over the state. The larger numbers of Negroes are concentrated in the Baltimore area, more than one-half of the total being in the City of Baltimore. Almost three-fourths of the Negroes in the state are in Baltimore City and in Anne Arundel, Baltimore, Montgomery, and Prince George's counties. The percentage of Negro population, however, is highest in southern Maryland and on the Eastern Shore. All the counties that

have more than 30 percent Negro population are in southern Maryland or on the Eastern Shore.

Maryland ranks fairly high among the states of the United States in density of population. The average for the country as a whole is 44 inhabitants per square mile; the average for Maryland is 184. The six states that exceed Maryland are Rhode Island with 624 per square mile, New Jersey with 553, Massachusetts with 546, Connecticut with 349, New York with 281, and Pennsylvania with 220. The density of population for each of the counties in Maryland is shown in Table 4.

TABLE 4*

POPULATION, DENSITY, AND PERCENTAGE OF POPULATION ACCORDING
TO COUNTY IN MARYLAND, 1940

County	Population	Population per Square Mile	Percentage of Total
Baltimore City.....	859,100	10,913	47.2
Baltimore County.....	155,825	258	8.2
Allegany.....	86,973	205	4.8
Prince George's.....	89,490	184	4.9
Montgomery.....	83,912	169	4.6
Anne Arundel.....	68,375	163	3.8
Washington.....	68,838	150	3.8
Frederick.....	57,312	86	3.1
Carroll.....	39,054	86	2.1
Wicomico.....	34,530	91	1.9
Harford.....	35,060	79	1.9
Dorchester.....	28,006	48	1.5
Cecil.....	26,407	75	1.4
Somerset.....	20,965	63	1.2
Worcester.....	21,245	44	1.2
Garrett.....	21,981	33	1.2
Talbot.....	18,784	69	1.0
Caroline.....	17,549	55	1.0
Charles.....	17,612	38	1.0
Howard.....	17,175	68	0.9
St. Mary's.....	14,626	40	0.8
Queen Anne's.....	14,476	39	0.8
Kent.....	13,465	48	0.7
Calvert.....	10,484	48	0.6
Total, State of Maryland...	1,821,244	184	100.0

* Source: U.S. Census, 1940 and Maryland Manual, 1945-46.

In general, the counties having the largest population also have the largest number per square mile. Only one county on the Eastern Shore has more than 70 inhabitants per square mile, and none of the three southern counties on the west of

Chesapeake Bay has as many as 50 inhabitants per square mile.

Estimates of the population changes between 1940 and 1945 in the Maryland counties indicate that substantial increases have occurred in Baltimore and the counties to the northeast of that city, in Allegany and Washington counties in the western part of the state, and in Montgomery and Prince George's counties adjacent to the District of Columbia. Changes in population in other counties during the years since 1940 have been small. Six counties are estimated to have lost population in this period; one of these is in the extreme western part of the state, one in southern Maryland, and the other four are on the Eastern Shore.

The distribution of population by age groups is important in considering the educational services of the state. There is a wide variation among the states of this country in the ratio of adults to young people. Table 5 shows, for each state of the United States, the total population, the number under twenty years of age, and the number twenty years of age and older. The final column shows for each state the percentage of the population under twenty.

Maryland ranks sixteenth among the states in the ratio of its youth population to its adult population. With slightly more than two adults to each young person, Maryland has relatively fewer children to educate and more adults to support their education than the average state in this country. This would indicate that, assuming its resources and effort were equal to the average in the United States, Maryland could give its children more education than two-thirds of the states are able to give to their children. This item of data is significant for higher education, inasmuch as it indicates the possibility that Maryland might be expected to do more than the average state in its provision for the education of its young people.

TABLE 5*
YOUTH POPULATION BY STATES, 1940

State	Total Population	Total under Twenty	Total Twenty and over	Percentage Youth Population Is of Adult Population
1. District of Columbia.....	663,091	166,865	496,226	33.6
2. California.....	6,907,387	1,911,902	4,995,485	38.3
3. New York.....	13,479,142	3,901,632	9,577,510	40.7
4. Washington.....	1,736,191	513,247	1,222,944	42.0
5. Oregon.....	1,089,684	323,663	766,021	42.3
6. New Jersey.....	4,160,165	1,249,924	2,910,241	42.9
7. Nevada.....	110,247	33,195	77,052	43.1
8. Illinois.....	7,897,241	2,380,997	5,516,244	43.2
9. Connecticut.....	1,709,242	517,587	1,191,655	43.4
10. Massachusetts.....	4,316,721	1,325,677	2,991,044	44.3
11. Delaware.....	266,505	83,809	182,696	45.9
12. Rhode Island.....	713,346	225,981	487,365	46.4
13. Ohio.....	6,907,612	2,204,932	4,702,680	46.9
14. New Hampshire.....	491,524	158,246	333,278	47.5
15. Missouri.....	3,784,664	1,220,803	2,563,861	47.6
16. Maryland.....	1,821,244	601,624	1,219,620	49.3
17. Indiana.....	3,427,796	1,134,460	2,293,336	49.5
18. Iowa.....	2,538,268	855,836	1,682,432	50.9
19. Kansas.....	1,801,028	608,255	1,192,763	51.0
20. Minnesota.....	2,792,300	946,500	1,845,800	51.3
21. Pennsylvania.....	9,900,180	3,362,676	6,537,504	51.4
22. Florida.....	1,897,414	645,309	1,252,105	51.5
23. Wisconsin.....	3,137,587	1,067,037	2,070,550	51.5
24. Michigan.....	5,256,106	1,792,376	3,463,730	51.7
25. Montana.....	559,456	193,031	366,425	52.7
26. Nebraska.....	1,315,834	456,632	859,202	53.1
27. Colorado.....	1,123,296	390,127	733,169	53.2
28. Vermont.....	359,231	125,128	234,103	53.4
29. Maine.....	847,226	300,086	547,140	54.4
30. Wyoming.....	250,742	90,721	160,021	56.7
31. South Dakota.....	642,961	243,145	399,816	60.8
32. Texas.....	6,414,824	2,432,648	3,982,176	61.1
33. Idaho.....	524,873	202,020	322,853	62.6
34. Virginia.....	2,677,773	1,048,885	1,628,888	64.4
35. Tennessee.....	2,915,841	1,153,047	1,762,794	65.4
36. Oklahoma.....	2,336,434	923,947	1,412,487	65.4
37. Louisiana.....	2,363,880	942,837	1,421,043	66.3
38. North Dakota.....	641,935	256,639	385,296	66.6
39. Arizona.....	499,261	202,004	297,257	68.0
40. Kentucky.....	2,845,627	1,158,856	1,686,771	68.7
41. Georgia.....	3,123,723	1,285,597	1,838,126	69.9
42. Arkansas.....	1,949,387	809,028	1,140,359	70.9
43. Utah.....	550,310	231,185	319,125	72.4
44. West Virginia.....	1,901,974	800,194	1,101,780	72.6
45. Mississippi.....	2,183,796	942,178	1,241,618	75.9
46. Alabama.....	2,812,961	1,216,449	1,596,512	76.2
47. North Carolina.....	3,571,623	1,566,069	2,005,554	78.1
48. South Carolina.....	1,899,804	864,775	1,035,029	83.6
49. New Mexico.....	513,818	237,893	275,925	86.2
Total, United States.....	131,669,275	45,305,604	86,363,671	52.5

* Source: U.S. Census, 1940.

ECONOMIC AND INDUSTRIAL CONDITIONS

The general economic and industrial conditions in a state have an important effect on its ability to provide educational service for its young people, and upon the needs of the state for personnel whose preparation involves attendance at colleges and universities. Table 6 shows, for each state and for the United States as a whole, the total population and the total number and percentage of the population in the labor force according to the *United States Census, 1940*.

With 42.1 percent of its total population in the labor force, Maryland ranks above the average for the United States. Only nine states and the District of Columbia exceed Maryland in the percentage of population in the labor force; most of these states are Maryland's neighbors along the Atlantic seaboard to the north and east. With a relatively high percentage of its citizens in the ranks of the producers, Maryland would seem likely to have an economic situation that would permit maintenance of better than average educational services.

Measures of the wealth of the various states are not altogether satisfactory at present. Data of this type that are available will be presented for such light as they may throw on the economic ability of the state.

A report by the National Industrial Conference made in 1937 places Maryland eighteenth among the states in total wealth, and twenty-third in per capita wealth. The per capita wealth in Maryland at that time was reported to be 7 percent above the average of the country as a whole.

The report by the United States Bureau of the Census on *Financial Statistics of States, 1940*, indicated that Maryland ranked twelfth among the states in value of property per capita, as indicated by assessed valuation of property subject to state and local taxation. Maryland's average was about 25 percent above the national average on assessed valuation per capita. This figure must be interpreted cautiously, however, because of variations in the methods of assessing property for state and local taxes.

TABLE 6*

RATIO OF THE LABOR FORCE TO THE TOTAL POPULATION,
UNITED STATES, BY STATES, 1940

State	Labor Force	Total Population	Percentage
1. District of Columbia.....	344,033	633,091	54.3
2. Rhode Island.....	321,644	713,346	45.1
3. Connecticut.....	770,003	1,709,242	45.0
4. New Jersey.....	1,857,340	4,160,165	44.6
5. New York.....	5,962,199	13,479,142	44.2
6. Nevada.....	47,979	110,247	43.5
7. Delaware.....	114,260	266,505	42.9
8. Massachusetts.....	1,844,260	4,316,721	42.7
9. Illinois.....	3,360,823	7,897,241	42.5
10. California.....	2,948,427	6,907,387	42.6
11. Maryland.....	767,091	1,821,244	42.1
12. New Hampshire.....	206,919	491,524	42.0
13. Oregon.....	453,382	1,089,684	41.6
14. Florida.....	786,804	1,897,414	41.4
15. Washington.....	716,501	1,736,191	41.2
16. Michigan.....	2,125,877	5,256,106	40.4
17. Pennsylvania.....	3,986,000	9,900,180	40.2
18. Missouri.....	1,521,086	3,784,664	40.2
19. Montana.....	224,994	559,456	40.2
20. Arizona.....	180,247	499,261	40.1
21. Ohio.....	2,765,687	6,907,612	40.0
22. Wyoming.....	100,409	250,742	40.0
23. Vermont.....	141,407	359,231	39.4
24. Minnesota.....	1,101,464	2,792,300	39.4
25. Georgia.....	1,225,705	3,123,723	39.2
26. Wisconsin.....	1,227,552	3,137,587	39.1
27. Maine.....	330,421	847,226	39.0
28. Indiana.....	1,331,378	3,427,796	38.8
29. Virginia.....	1,031,289	2,677,773	38.5
30. South Carolina.....	730,780	1,899,804	38.4
31. Texas.....	2,454,924	6,414,824	38.2
32. Nebraska.....	501,013	1,315,834	38.0
33. Iowa.....	957,869	2,538,268	37.7
34. Colorado.....	421,493	1,123,296	37.5
35. Louisiana.....	884,164	2,363,880	37.4
36. South Dakota.....	239,826	642,961	37.3
37. North Carolina.....	1,333,773	3,571,623	37.3
38. Kansas.....	669,915	1,801,028	37.2
39. Mississippi.....	808,462	2,183,796	37.0
40. North Dakota.....	235,661	641,935	36.7
41. Tennessee.....	1,071,904	2,915,841	36.7
42. Idaho.....	191,196	524,873	36.4
43. Alabama.....	1,017,188	2,832,961	35.9
44. Kentucky.....	998,700	2,845,627	35.1
45. Arkansas.....	678,859	1,949,387	34.8
46. Oklahoma.....	804,582	2,336,434	34.4
47. New Mexico.....	177,908	531,818	33.4
48. West Virginia.....	634,957	1,901,974	33.3
49. Utah.....	181,244	550,310	32.9
Total, United States.....	52,789,499	131,669,275	40.0

* Source: U.S. Census, 1940.

Data obtained from *Tax Facts and Figures, 1941*¹ indicate that Maryland ranked nineteenth among the states in 1940 on the basis of state taxes collected per capita. For 1937 the same source reported Maryland as ranking twentieth among the states in per capita collections of local taxes. On neither of these figures did Maryland deviate appreciably from the national average.

Further data from the Tax Foundation show the amount of federal tax collections from each state in 1940. Maryland ranked fifteenth with respect to total federal tax collections. On a per capita basis Maryland ranked fifth among the states and was 41 percent above the national average. The data for federal tax collections must be interpreted with considerable reservation because they relate only to the point at which the federal taxes were collected, and do not indicate the wealth which produced the taxes. For example, North Carolina ranks fourth among the states on this measure, chiefly because of the large amounts of tobacco taxes which are collected at the point of processing in that state.

One of the best measures of economic ability that is now available is based on the income received by individuals residing within each state. The United States Department of Commerce has made available figures showing per capita income payments received by individuals within states in 1942. On this measure Maryland ranks ninth among the states, and its per capita income is 30 percent above the national average.

Figures are available showing the volume of retail trade for each state, on the basis of data gathered in the 1939 *Census of Business*². In total retail sales Maryland ranked twentieth among the states, and on per capita retail sales Maryland ranked twenty-first, or about 7 percent, above the national average.

The U.S. Bureau of the Census has also published data regarding the volume of manufacturing for each state in 1939. Maryland ranked fifteenth among the states in total value of manufactured products and fourteenth in total salaries and

¹ *Tax Facts and Figures* (New York: The Tax Foundation, 1941).

² *Census of Business, Retail Trade*, Vol. I, 1939, Pt. I.

wages involved in manufacturing. In per capita value of manufactured products Maryland ranked ninth and was 27 percent above the national average. On per capita value of salaries and wages in manufacturing Maryland ranked thirteenth and was 18 percent above the national average.

The findings from the foregoing references are summarized in Table 7, which shows Maryland's rank among the states for both total and per capita figures on each of some nine measures of economic ability and also the extent to which Maryland exceeds the national average on a per capita basis on each of these measures.

TABLE 7
MARYLAND'S RANK AMONG THE STATES ON VARIOUS MEASURES
OF ECONOMIC ABILITY

MEASURE OF ECONOMIC ABILITY	YEAR	MARYLAND'S RANK AMONG 49 STATES (INCLUDING D.C.) ON BASIS OF		PERCENTAGE BY WHICH MARYLAND EXCEEDS NATIONAL AVERAGE, PER CAPITA
		Total Figures	Per Capita Figures	
National Wealth.....	1937	18	23	7
Assessed Valuation of Property Subject to State and Local Taxation.....	1940	17	12	25
State Tax Collections.....	1940	24	19	6
Local Tax Collections.....	1937	17	20	-1
Federal Tax Collections.....	1940	15	5	41
Income Received by Individuals..	1942	..	9	30
Volume of Retail Trade.....	1939	20	21	7
Total Value of Manufactured Products.....	1940	15	9	27
Total Salaries and Wages in Manufacturing.....	1940	14	13	18

On each of the measures that is available as an indication of the state's economic position, Maryland stands in the upper half of the list of states on a per capita basis. Maryland exceeds the national average on every measure except one—local tax collections—and on that measure it is practically at the national average. The general conclusion from these data is that Maryland is in a very favorable position, as compared with other states, to support a satisfactory program of higher education.

It is important to compare the extent of the potential educational burden as represented by the proportion of youth in the total population with a suitable measure of economic ability. Table 8 presents in parallel columns data showing the percentage which the youth population of each state is of the total national youth population, and the percentage which the total income received by individuals in the state is of the total national income.

TABLE 8*
YOUTH UNDER TWENTY YEARS, AND NATIONAL INCOME,
BY STATES

State	Youth under 20 Years, 1940, Percentage of Total	National Income, 1941, Percentage of Total	State	Youth under 20 Years, 1940, Percentage of Total	National Income, 1941, Percentage of Total
Alabama.....	2.69	1.08	Nebraska.....	1.00	0.72
Arizona.....	0.45	0.31	Nevada.....	0.08	0.12
Arkansas.....	1.78	0.67	New Hampshire.....	0.35	0.35
California.....	4.23	7.27	New Jersey.....	2.76	4.08
Colorado.....	0.86	0.77	New Mexico.....	0.52	0.25
Connecticut.....	1.14	2.01	New York.....	8.61	15.12
Delaware.....	0.19	0.33	N. Carolina.....	3.45	1.51
Dist. of Columbia.....	0.36	1.13	N. Dakota.....	0.56	0.34
Florida.....	1.42	1.15	Ohio.....	4.87	6.05
Georgia.....	2.83	1.32	Oklahoma.....	2.04	1.07
Idaho.....	0.45	0.31	Oregon.....	0.71	0.84
Illinois.....	5.26	7.33	Pennsylvania.....	7.42	8.23
Indiana.....	2.50	2.58	Rhode Island.....	0.50	0.68
Iowa.....	1.89	1.55	S. Carolina.....	1.91	0.73
Kansas.....	1.34	1.00	S. Dakota.....	0.54	0.32
Kentucky.....	2.56	1.17	Tennessee.....	2.55	1.28
Louisiana.....	2.08	1.12	Texas.....	5.37	3.53
Maine.....	0.66	0.56	Utah.....	0.51	0.35
Maryland.....	1.32	1.63	Vermont.....	0.28	0.23
Massachusetts.....	2.92	4.33	Virginia.....	2.31	1.52
Michigan.....	3.96	4.76	Washington.....	1.14	1.58
Minnesota.....	2.09	1.81	W. Virginia.....	1.76	1.03
Mississippi.....	2.08	0.66	Wisconsin.....	2.36	2.19
Missouri.....	2.69	2.42	Wyoming.....	0.21	0.20
Montana.....	0.43	0.40	United States.....	100.00	100.00

* Source: Daniel Creamer and Charles Mervin, "State Distribution of Income Payments, 1929-41," *Survey of Current Business*, XXII (July 1942), 22 ff.

It is significant to note from Table 8 that Maryland's population contains 1.32 percent of the youth of the nation, but the people of the state receive 1.63 percent of the income of the nation. In other words, Maryland is from 20 to 25 percent better off than the average state in terms of income com-

pared with the number of young people in its population. With respect to the ratio between youth to be educated and per capita income, Maryland is much like the states lying east and north of it. In states to the south, such as Virginia, West Virginia, and the Carolinas, the percentage of national income is smaller than the percentage of youth population, just the reverse of the condition in Maryland. These data would indicate that comparison might most profitably be made between Maryland and the northern and eastern states rather than with the southern states.

Table 6 dealt with the total percentage of the population of the labor force. In that connection it was pointed out that Maryland exceeds the national average in the percentage of its population who are in productive employment. It is important to know not only the extent to which the population enters the labor force but also the kinds of work in which they are engaged. Table 9 presents data taken from the *United States Census, 1940* showing the numbers and percentages of the workers in Maryland that are in each industrial group; percentages for the entire United States are also given for comparative purposes. The lower part of the table classifies the workers according to the kinds of occupations in which they engage.

Table 9 contains data of considerable significance for the program of higher education in the State of Maryland. It is apparent, for example, that agriculture engages only about one-half of the percentage of the population in Maryland that it does in the country as a whole. Mining employs a relatively small percentage of Maryland's population. Personal services engage a much smaller percentage of the Maryland labor force than in other states. But construction, manufacturing, and transportation provide employment for significantly larger percentages of the working population of Maryland than in the country as a whole. The percentage of government workers in Maryland is almost double the average for the country as a whole, doubtless because of the occupations followed by many residents of suburban areas outside the District of Columbia.

When the workers are classified according to the kinds of work they do, rather than according to the kinds of industry in which they are engaged, some interesting results are found. Farmers, farm managers, farm laborers, and service workers

TABLE 9*

NUMBER AND PERCENTAGE OF EMPLOYED WORKERS FOURTEEN YEARS
AND OVER, BY MAJOR OCCUPATION GROUP AND
INDUSTRY GROUP, 1940

WORKERS	NUMBER IN MARYLAND	PERCENTAGE OF TOTAL		
		United States	Mary- land	Baltimore City
<i>Employed by Industry Group:</i>				
Agriculture, Forestry and Fishery.....	72,751	18.8	9.5	0.2
Mining.....	4,024	2.0	0.7	0.1
Construction.....	39,288	4.6	5.8	4.8
Manufacturing.....	180,478	23.4	28.4	31.6
Transportation, Communication.....	58,351	6.9	9.0	9.9
Trade (Wholesale and Retail).....	114,749	16.7	17.8	20.3
Finance, Insurance, Real Estate.....	23,224	3.2	3.7	4.4
Business and Repair Services.....	12,433	1.9	1.9	1.8
Personal Services.....	69,166	8.9	5.0	11.3
Amusement and Recreation.....	6,155	0.9	0.8	1.1
Professional and Related Services.....	49,854	7.3	7.6	7.5
Government.....	46,045	3.9	7.7	5.1
Industry Not Reported.....	14,393	1.5	2.1	1.8
Total.....	690,911	100.0	100.0	99.9
<i>Employment by Occupational Group:</i>				
Professional and Semiprofessional Workers..	51,274	7.4	8.4	.....
Farmers and Farm Managers.....	31,861	11.4	5.0	.....
Managers, Proprietors, Officials.....	53,893	8.3	9.1	.....
Clerical and Sales.....	126,351	16.6	21.6	.....
Craftsmen, Foremen, and Kindred.....	92,905	11.2	15.7	.....
Operatives and Kindred.....	129,232	18.3	20.2	.....
Farm Laborers and Foremen.....	35,173	6.9	3.8	.....
Service Workers and Laborers.....	162,517	19.1	15.2	.....
Occupation Not Reported.....	7,705	0.8	1.1	.....
Total.....	690,911	100.0	100.0	.....

* Source: U.S. Census, 1940.

and laborers constitute considerably smaller percentages of the total labor force in Maryland than in the country as a whole. Professional and semiprofessional people, managers, proprietors and officials, clerical and salesmen, craftsmen and foremen, and operatives are relatively more numerous in Maryland than in other states.

It will be observed that, in general, Maryland has a high proportion of its workers in the kinds of occupations that require extensive education, and a smaller than average proportion in such occupations as laborer and personal service, where little education is required. These data indicate that, in order to keep its relative industrial position among the states, Maryland would be expected to provide education at the high school and college levels for a larger proportion of its young people than in most other states.

Although agriculture is followed by a smaller than average percentage of the total population in Maryland, the actual numbers engaged in farming and related occupations in the state are significantly large. In certain sections of the state agriculture tends to be of a specialized nature. The Eastern Shore, for example, is nationally known as a center for poultry raising. Southern Maryland has a profitable specialty in its tobacco growing. Dairying tends to be a highly important form of agriculture in the counties that are part of the Washington-Baltimore-Philadelphia milkshed. In most of the other parts of the state practically all of the forms of agriculture are carried on that are appropriate to the climate.

THE SCHOOL-GOING POPULATION IN MARYLAND

The extent to which young people take advantage of the opportunity for continuing their education is determined by several factors. The general economic level of the population has much to do with college-going tendency. The kinds of opportunities that are available for education and the attitudes and traditions of the people concerning education are important conditioning factors.

The previous discussion has indicated that economic conditions in Maryland are such as to lead to the expectation that a relatively large proportion of the young people would avail themselves of higher education. Some of the facts about the extent to which Maryland young people remain in school as compared with young people in other states are shown in Table 10.

TABLE 10*
PERCENTAGE OF YOUTH OF VARIOUS AGE GROUPS IN SCHOOL,
BY STATES, 1940

STATE	AGES 18 TO 20 IN SCHOOL		AGES 16 TO 24 IN SCHOOL		AGES 5 TO 24 IN SCHOOL	
	Percentage	Rank	Percentage	Rank	Percentage	Rank
Utah.....	36.1	1	56.7	1	64.8	1
California.....	34.2	2	53.8	2	62.2	5
Washington.....	34.0	3	53.0	3	60.1	15
Idaho.....	32.3	4	50.8	4	60.9	10
Nevada.....	32.0	5	50.6	5	59.0	25
Oregon.....	31.5	8	50.2	6	59.1	21
Kansas.....	31.9	6	50.0	7	62.8	3
Montana.....	31.8	7	50.0	8	59.5	17
Wisconsin.....	27.2	13	47.0	9	62.1	6
District of Columbia.....	30.7	9	46.9	10	57.2	34
South Dakota.....	28.8	11	46.6	11	60.8	12
Wyoming.....	26.6	15	46.6	12	59.0	24
Oklahoma.....	29.6	10	46.3	13	61.5	8
New York.....	26.0	18	46.3	14	60.6	13
Ohio.....	24.5	22	46.3	15	59.5	18
Colorado.....	26.8	14	45.9	16	60.4	14
Massachusetts.....	26.0	17	45.6	17	60.9	11
Nebraska.....	25.2	21	45.2	18	63.6	2
Minnesota.....	26.5	16	44.3	19	60.0	12
Indiana.....	23.3	27	43.5	20	59.0	22
North Dakota.....	28.1	12	43.2	21	59.4	19
Illinois.....	23.6	24	43.0	22	58.0	30
Michigan.....	22.9	32	43.0	23	61.8	7
Connecticut.....	23.2	28	42.8	24	59.2	20
Iowa.....	23.0	31	42.7	25	61.2	9
Pennsylvania.....	21.1	39	42.6	26	58.7	28
Maine.....	23.5	25	41.2	27	62.3	4
Vermont.....	24.4	23	41.1	28	59.0	27
New Mexico.....	25.8	19	41.1	29	58.6	29
New Hampshire.....	23.4	26	41.0	30	58.8	27
New Jersey.....	22.1	33	40.8	31	58.9	26
Arizona.....	25.4	20	40.8	32	57.2	33
Texas.....	21.9	34	38.4	33	55.3	37
Delaware.....	21.3	35	38.3	34	55.6	36
Florida.....	23.2	29	37.9	35	54.7	38
Mississippi.....	23.2	30	37.9	36	54.6	41
Missouri.....	21.0	40	37.9	37	57.4	31
West Virginia.....	21.2	36	36.3	38	56.6	35
Arkansas.....	21.1	38	35.9	39	54.3	43
Alabama.....	21.2	37	35.8	40	54.7	39
Rhode Island.....	18.4	44	35.1	41	57.3	32
Louisiana.....	19.6	42	34.2	42	54.3	42
Tennessee.....	20.3	41	34.0	43	52.8	46
Virginia.....	18.5	43	33.1	44	52.4	47
Maryland.....	17.9	45	32.9	45	54.6	40
North Carolina.....	17.7	46	32.8	46	54.0	44
South Carolina.....	16.4	49	31.0	47	53.3	45
Georgia.....	16.4	48	29.8	48	52.0	48
Kentucky.....	17.3	47	28.4	49	39.0	49
United States.....	23.6	.....	41.6	.....	57.7	.....

* Source: U.S. Census, 1940.

It is surprising to find that, according to the *United States Census* of 1940, Maryland ranks fortieth among the states in the percentage of its population ages five to twenty-four who are attending school. It ranks forty-fifth among the states when either the eighteen to twenty or the sixteen to twenty-four year-old population is used as a base. The only states having smaller percentages of their eighteen to twenty or sixteen to twenty-four year-old population in school than Maryland has are Kentucky, Georgia, and the Carolinas. The number of eighteen to twenty year-old youth in school in Maryland would have to be increased approximately one-third to equal the average for the United States; it would have to be more than doubled to reach the level attained in the State of Utah. The conditions revealed in Table 10 for Maryland are difficult to explain, especially in view of the previous findings with respect to the industrial and economic conditions in the state.

One bit of information that throws an interesting light on the attitude of the people of Maryland toward education is found in the recently released figures for the membership of the Parent-Teachers Association in each state. According to figures in the *Journal of the National Education Association* for December 1946 (page 564), Maryland ranks forty-sixth among the fifty-one states and territories with respect to the percentage that Parent-Teachers Association membership is of total population. Only five states have smaller percentages of their total population enrolled in the P-TA, the Association which provides perhaps the chief avenue for expression of interest in the schools by the general public. The states surrounding Maryland have from one and a half to two and a half times the proportion of Parent-Teachers Association membership that Maryland has.

Despite some of the discouraging indications from the data thus far presented, it must be said that Maryland is generally recognized as having made remarkable progress in its public school system in recent years. The plan of administration through county school systems is nationally recognized as one of the best arrangements in the country,

and many states have looked to Maryland for a model toward which might be pointed reorganizations in their local systems of school administration. The recent step in providing a twelve-grade school system indicates a commendable effort to improve the opportunities for children in the schools. The establishment of uniform salary schedules for Negro and white teachers is an indication of fundamental progress.

The October 1946 number of the *Research Bulletin of the National Education Association* presents an interesting study of the extent to which the various states have attained certain goals in the financial organization of their public school systems. Some seventy-seven specific goals were determined as desirable by a group of experts on school finance. Each state was then checked with respect to the extent to which it had achieved each of these goals. A tabulation of the results shows that Maryland ranks seventh from the top in the list of states with respect to the extent to which its system of financing public schools has achieved the desirable goals. This is a highly commendable situation and speaks well for the leadership that has guided the State of Maryland in its progressive improvements in the financing of the public school system.

Although the findings with respect to the extent of school attendance by older-age youth in Maryland are somewhat disappointing, there is every reason to believe that, with the strengthening of the public school system that has recently taken place, the young people of Maryland will soon be continuing their education at a rate equal to or beyond the average for the United States as a whole.

The data in Table 10 with respect to college attendance are further substantiated by figures from other sources. The U.S. Office of Education *Biennial Survey* shows that in 1939-40 for the country as a whole enrollments in institutions of higher education were 12.1 percent of the 1940 population ages fifteen to nineteen; the total enrollments in Maryland institutions of higher education were only 11.1 percent of the population ages fifteen to nineteen in this state. This comparison is somewhat inexact because students

from other states attend Maryland colleges, and Maryland residents attend colleges in other states. When the appropriate adjustments are made to account for student migration, the data show that the proportion of young people resident in Maryland who attend college is about 10 percent less than the proportion for the United States as a whole.

The survey staff attempted to obtain data concerning the total number of graduates from high schools in Maryland. Unfortunately there seems to be no source from which this information can now be obtained. Data are available for the public high schools through the State Department of Education, but the privately controlled high schools do not report any information to any central source. It would seem advisable to give authority to the State Education Department to collect and publish information concerning all the high schools in the state, whether publicly or privately controlled. The public high schools in Maryland have been graduating in the neighborhood of 9,000 annually. Table 11 shows the trend of the most recent ten-year period of graduates from public high schools both white and Negro in the Maryland counties and Baltimore City.

The number of graduates from public high schools was increasing rapidly in Maryland until the early years of the war. The number was almost 50 percent larger in 1942

TABLE 11*

PUBLIC HIGH SCHOOL GRADUATES IN MARYLAND COUNTIES AND BALTIMORE CITY FROM 1936 TO 1946

YEAR	MARYLAND COUNTIES		BALTIMORE CITY		TOTAL	
	White	Negro	White	Negro	White	Negro
1936.....	5,322	374	2,684	391	7,006	765
1937.....	5,472	392	2,743	367	7,215	759
1938.....	5,930	510	2,825	440	8,755	950
1939.....	6,306	576	2,900	445	9,206	1,021
1940.....	6,813	673	2,989	510	9,802	1,183
1941.....	7,038	708	2,990	545	10,028	1,253
1942.....	7,176	659	3,088	579	10,264	1,238
1943.....	6,741	689	2,546	526	9,287	1,215
1944.....	6,550	718	2,302	416	8,852	1,134
1945.....	6,531	755	2,281	453	8,812	1,208

* Source: Data furnished by State Department of Education.

than it had been six years earlier. The relatively large decrease in high school graduates during the war is a situation common to the high schools all over the country. Young people of high school age found it profitable to enter employment, and patriotic motives led many to go to work in war industries. Many young men entered the armed services before they had finished high school. With the end of the war it may be confidently expected that high school enrollments and high school graduates in Maryland will continue the upward trends that were interrupted in 1941-42.

The extent of college attendance varies widely in the counties in Maryland. Table 12, taken from the *United States Census, 1940*, shows for each county in Maryland the percentage of two age groups of young people who were attending school.

In general the counties on the Eastern Shore rank low with respect to school attendance in the college-age groups. Not one of the Eastern Shore counties reaches the general average of the state for either the eighteen to twenty or the twenty-one to twenty-four year-old group.

The reasons why the proportion of Maryland youth continuing their education is relatively small are difficult to discover. The present survey has had neither time nor resources to inquire deeply into this problem. One can scarcely avoid the conclusion that the public school system must, in part, be responsible. It would seem appropriate for the State Department of Education to make inquiry to determine whether there is something in the organization or program of secondary education in Maryland that causes the schools to serve a smaller than normal percentage of the young people. So far as deterrents are present in the institutions of higher education and have been discovered by the survey staff, they will be discussed in this survey in the analysis of conditions within the institutions.

It is appropriate to inquire in this survey where Maryland young people go to college. The most recent data available for the United States as a whole are provided by a study made through the U.S. Office of Education covering college

attendance in 1938-39³. This study covers a total of 14,248 Maryland residents who were attending college in that year. Of these 10,247, or 71.9 percent, were attending institutions in the State of Maryland, and 4,001 or 28.1 percent were attending institutions outside the state. Within the colleges

TABLE 12*

COLLEGE ATTENDANCE BY POPULATION IN MARYLAND COUNTIES, 1940

COUNTY	PERSONS 18 TO 20 YEARS OLD			PERSONS 21 TO 24 YEARS OLD			PERCENTAGE POPULATION ATTENDING SCHOOL
	Total Number	Number Attending School	Percentage Attending School	Total Number	Number Attending School	Percentage Attending School	
Anne Arundel.....	5,501	1,641	29.8	6,103	1,179	19.3	24.3
Montgomery.....	4,126	1,533	37.2	5,343	569	10.6	22.2
Prince George's....	4,924	1,012	20.6	6,033	337	5.6	12.3
Allegany.....	5,277	1,025	19.4	6,494	177	2.7	10.3
Baltimore City....	47,946	8,313	17.3	64,094	3,110	4.9	10.2
Baltimore County..	8,765	1,506	17.2	11,049	447	4.3	10.0
Frederick.....	3,296	470	14.3	3,836	148	3.9	8.7
Washington.....	3,895	647	16.6	4,756	104	2.2	8.7
Kent.....	744	106	14.2	792	26	3.3	8.6
Cecil.....	1,377	212	15.4	1,636	40	2.4	8.4
St. Mary's.....	813	123	15.1	846	13	1.5	8.2
Howard.....	1,041	131	12.6	1,166	44	3.8	7.9
Charles.....	1,091	157	14.4	1,154	8	0.7	7.3
Somerset.....	1,154	145	12.6	1,253	20	1.6	6.9
Wicomico.....	1,948	248	12.7	2,418	47	1.9	6.8
Harford.....	2,409	282	11.7	2,688	47	1.7	6.5
Garrett.....	1,422	165	11.6	1,523	24	1.6	6.4
Caroline.....	893	108	12.1	1,184	20	1.7	6.2
Dorchester.....	1,623	155	9.6	1,947	40	2.1	5.5
Queen Anne's.....	757	74	9.8	936	19	2.0	5.5
Talbot.....	971	96	9.9	1,219	17	1.4	5.2
Worcester.....	1,141	108	9.5	1,392	20	1.4	5.2
Calvert.....	622	54	8.7	643	8	1.2	4.9
Carroll.....	2,070	221	10.7	2,491	51	2.0	4.9
State of Maryland.....	103,806	18,532	17.9	130,986	6,545	5.0	10.7

* Source: U.S. Census, 1940.

and universities in Maryland there were enrollments totaling 15,402; almost exactly one-third of these, 5,155, came from outside the State of Maryland. Thus, the institutions of higher education in Maryland served students from other states to a larger extent than Maryland residents were served

³ Fred J. Kelly and Ruth E. Eckert, *Residence and Migration of College Students*, Pamphlet No. 98, Federal Security Agency, U.S. Office of Education (Washington: Government Printing Office, 1945).

in institutions in other states. That is, Maryland "exported" 4,001 residents to attend college in other states, while 5,155 migrated from other states to attend college in Maryland. The location of certain strong privately controlled institutions of higher education in Maryland is doubtless responsible for the net migration of 1,154 students to Maryland.

Data are also available from the study previously mentioned to show where the young people of each state attended college in 1938-39. These data are summarized in Table 13, which shows the percentage of the college-going population resident in each state who attended in their home state and also the percentage who attended in some other state.

Maryland ranks thirty-eighth among the states in the extent to which its college-going residents were cared for in the institutions of their home state. In only eleven other states

TABLE 13
PERCENTAGE OF STUDENTS ATTENDING INSTITUTIONS WITHIN THEIR
HOME STATE AND THE PERCENTAGE ATTENDING IN OTHER
STATES, 1938-1939

State	Home State	Other States	State	Home State	Other States
California.....	94.0	6.0	Ohio.....	80.6	19.4
Texas.....	92.0	8.0	Pennsylvania.....	80.2	19.8
Louisiana.....	91.2	8.8	Massachusetts.....	78.8	21.2
Utah.....	90.4	9.6	New Mexico.....	78.8	21.2
Washington.....	89.0	11.0	Virginia.....	77.2	22.8
Oklahoma.....	87.6	12.4	Arkansas.....	76.8	23.2
Kansas.....	87.0	13.0	North Dakota.....	76.3	23.7
Minnesota.....	86.7	13.3	New York.....	75.1	24.9
North Carolina.....	85.8	14.2	Montana.....	74.6	25.4
Oregon.....	85.6	14.4	West Virginia.....	74.3	25.7
Michigan.....	84.6	15.4	Idaho.....	72.8	27.2
Kentucky.....	84.0	16.0	South Dakota.....	72.2	27.8
South Carolina.....	83.7	16.3	Maryland.....	71.9	28.1
Nebraska.....	83.5	16.5	Nevada.....	71.4	28.6
Colorado.....	83.3	16.7	Maine.....	69.6	30.4
Wisconsin.....	83.0	17.0	District of Columbia.....	69.2	30.8
Georgia.....	82.8	17.2	Florida.....	69.0	31.0
Tennessee.....	82.8	17.2	Rhode Island.....	64.2	35.8
Iowa.....	82.0	18.0	Vermont.....	63.5	36.5
Alabama.....	81.9	18.1	Wyoming.....	61.8	38.2
Indiana.....	81.9	18.1	New Hampshire.....	61.3	38.7
Mississippi.....	81.7	18.3	Connecticut.....	43.2	56.8
Arizona.....	80.9	19.1	New Jersey.....	40.5	59.5
Missouri.....	80.8	19.2	Delaware.....	35.2	64.8
Illinois.....	80.6	19.4	United States.....	80.6	19.4

did a larger percentage migrate to outside states for their college-level education.

Some interest attaches to the data regarding the number of Maryland youth who attended college in each other state and to the number of residents of each state who came to Maryland for higher education. These data, also taken from the U.S. Office of Education study previously referred to, are presented in Table 14.

Young people went from Maryland to forty-four other states for higher education in 1938-39. The nearby states of Pennsylvania and Virginia and the District of Columbia attracted fifty-six percent of the total who migrated from Maryland to other states for college attendance. Relatively small numbers of Marylanders went to the nearby states of New Jersey and Delaware for higher education, probably because of the limited facilities for higher education in those states. Few people went from Maryland to West Virginia for higher education, probably because the institutions in West Virginia are not easily accessible except to a limited group in the western part of Maryland.

The 5,155 students who came to Maryland from other states for higher education came from every state in the union except Wyoming and from many outlying territories and foreign countries. New York furnished the largest number, and other leading states were Pennsylvania, the District of Columbia, New Jersey, and Connecticut.

The final column of Table 14 shows the excess of migration out of Maryland to each state over the migration into Maryland from that state. It will be observed that institutions in the District of Columbia served 356 more residents of Maryland than there were residents of the District who came to Maryland for higher education. The other states for which an "export" balance was greatest were Virginia and North Carolina. Heavy "import" balances, shown as minus figures in the table, are indicated for New York, New Jersey, Pennsylvania, and Connecticut.

The State Department of Education has furnished the survey staff with a complete tabulation of the institutions

TABLE 14*

WHERE MARYLAND YOUTH WENT TO COLLEGES, AND FROM WHENCE
STUDENTS CAME TO ATTEND MARYLAND COLLEGES IN 1938-39

State	Maryland Youth Who Attended College in	Number of Youth Who Came to Maryland Colleges	Plus or Minus
District of Columbia.....	1,138	782	+356
Pennsylvania.....	566	827	-261
Virginia.....	559	184	+375
New York.....	270	1,036	-766
Massachusetts.....	214	141	+ 73
North Carolina.....	198	94	+104
New Jersey.....	138	556	-418
Illinois.....	117	72	+ 45
Ohio.....	108	103	+ 5
West Virginia.....	96	127	- 31
Connecticut.....	89	231	-142
Indiana.....	61	34	+ 27
California.....	49	33	+ 16
Michigan.....	46	69	- 23
Tennessee.....	38	40	- 2
Georgia.....	36	52	- 16
Kentucky.....	32	22	+ 10
Alabama.....	32	33	- 1
Delaware.....	29	88	- 59
New Hampshire.....	29	21	+ 8
Iowa.....	22	34	- 12
Wisconsin.....	17	23	- 6
Missouri.....	16	26	- 10
South Carolina.....	15	25	- 10
Arkansas.....	10	9	+ 1
Florida.....	9	53	- 44
Rhode Island.....	9	53	- 44
Colorado.....	8	9	- 1
Texas.....	8	42	- 34
Louisiana.....	7	14	- 7
Minnesota.....	6	21	- 15
Kansas.....	4	19	- 15
Maine.....	4	13	- 9
Vermont.....	4	5	- 1
Nebraska.....	3	11	- 8
Idaho.....	2	2	.....
Mississippi.....	2	9	- 7
New Mexico.....	2	2	.....
South Dakota.....	2	4	- 2
Washington.....	2	12	- 10
Arizona.....	1	5	- 4
Oklahoma.....	1	13	- 12
Oregon.....	1	6	- 5
Utah.....	1	5	- 4
Montana.....	0	6	- 6
Nevada.....	0	3	- 3
North Dakota.....	0	3	- 3
Wyoming.....	0	0	.....
Outlying Territories.....	.....	82	- 82
Foreign Countries.....	.....	101	-101
Total.....	4,001	5,155	-1,154

* Source: Fred J. Kelly and Ruth E. Eckert, *Residence and Migration of College Students*, Pamphlet No. 98, Federal Security Agency, U.S. Office of Education (Washington: Government Printing Office, 1945).

attended by the 1945 graduates of the Maryland county high schools (excluding Baltimore City). Table 15 shows a summary of these data for the freshmen who went from Maryland to enter colleges or universities in other states following their graduation from the Maryland county white high schools in 1945. Table 16 shows similar information for the graduates of Negro high schools.

TABLE 15*

ATTENDANCE BY 1945 GRADUATES OF WHITE HIGH SCHOOLS IN MARYLAND
COUNTIES (EXCLUDING BALTIMORE CITY) AT COLLEGES AND
UNIVERSITIES IN OTHER STATES

STATE	NUMBER OF FRESHMEN ENTERING FROM MARYLAND COUNTIES	NUMBER OF DIFFERENT INSTITU- TIONS ATTENDED	NUMBER OF INSTITUTIONS ATTENDED BY			LARGEST NUMBER OF STUDENTS ATTENDING, ANY ONE COLLEGE
			11 or More	6-10	1-5	
Virginia.....	80	22	2	1	19	17
Pennsylvania.....	59	27	0	1	26	7
District of Columbia.....	52	10	1	1	8	24
West Virginia.....	27	5	1	0	4	14
North Carolina.....	25	11	0	0	11	5
Ohio.....	24	10	0	1	9	7
Delaware.....	16	2	1	1	0	10
New York.....	15	8	0	0	8	4
Tennessee.....	11	4	0	1	3	6
Missouri.....	10	4	0	1	3	6
Florida.....	8	5	0	0	5	3
Illinois.....	8	7	0	0	7	2
California.....	6	4	0	0	4	2
Indiana.....	6	4	0	0	4	2
Georgia.....	3	2	0	0	2	2
New Jersey.....	3	3	0	0	3	1
Iowa.....	3	3	0	0	3	1
Michigan.....	3	2	0	0	2	2
Colorado.....	2	2	0	0	2	1
Kentucky.....	2	2	0	0	2	1
Vermont.....	2	2	0	0	2	1
Alabama.....	2	2	0	0	2	1
Oklahoma.....	2	2	0	0	2	1
Louisiana.....	2	1	0	0	1	2
South Carolina.....	1	1	0	0	1	1
Mississippi.....	1	1	0	0	1	1
Texas.....	1	1	0	0	1	1
New Mexico.....	1	1	0	0	1	1
Rhode Island.....	1	1	0	0	1	1
Connecticut.....	1	1	0	0	1	1
Wisconsin.....	1	1	0	0	1	1
New Hampshire.....	1	1	0	0	1	1
Total.....	379	152	5	7	140	.....

* Source: From data furnished by the State Department of Education.

Maryland young people who went out of the state for higher education in 1945 attended a large number of different institutions. The states attracting the largest number of white freshmen from Maryland counties were Virginia, Pennsylvania, and the District of Columbia. In no case was there heavy concentration of Maryland county residents at any one institution. The only institutions to which 10 or

TABLE 16*

ATTENDANCE BY 1945 GRADUATES OF NEGRO HIGH SCHOOLS IN MARYLAND
COUNTIES (EXCLUDING BALTIMORE CITY) AT COLLEGES AND
UNIVERSITIES IN OTHER STATES

STATE	NUMBER OF FRESHMEN STUDENTS ENTERING FROM MARYLAND COUNTIES	NUMBER OF DIFFERENT INSTITU- TIONS ATTENDED	NUMBER OF INSTITUTIONS ATTENDED BY			LARGEST NUMBER OF STUDENTS ATTENDING ANY ONE COLLEGE
			11 or More	6-10	1-5	
Virginia.....	22	3	1	0	2	16
District of Columbia.....	13	2	0	1	1	8
North Carolina.....	10	4	0	1	3	6
Delaware.....	6	1	0	1	0	6
Pennsylvania.....	3	1	0	0	1	3
Massachusetts.....	2	2	0	0	2	1
New York.....	2	2	0	0	2	1
Ohio.....	2	1	0	0	1	2
West Virginia.....	2	1	0	0	1	2
Alabama.....	1	1	0	0	1	1
Georgia.....	1	1	0	0	1	1
Iowa.....	1	1	0	0	1	1
Total.....	65	20	1	3	16	.....

* Source: From data furnished by the State Department of Education.

more freshmen went from Maryland counties in 1945 were George Washington University in Washington (24), Mary Washington College in Virginia (17), Potomac State College in West Virginia (14), Bridgewater College in Virginia (11), and Wesley Junior College in Delaware (10).

The tabulation for Negro high school graduates in Maryland counties (excluding Baltimore City) shows that a total of only 65 went out of the state to enter colleges in other states as freshmen in 1945. Eleven states and the District of Columbia are represented in the choices of these students.

Virginia, the District of Columbia, and North Carolina were the only states attracting as many as 10 Negro high school graduates in 1945. Hampton Institute in Virginia was the only institution to which more than 8 freshmen went from the Negro high schools in Maryland counties in 1945.

Data were requested from each of the Maryland institutions that receive support from public funds to show the geographical distribution of the homes of students attending in the years 1945-46. The home county for each Maryland resident was ascertained, and the home states were indicated for students from other states. Table 17 shows these data. Princess Anne College could not supply the data in time for publication in this report.

The tabulations show considerable differences in the geographical origins of the student bodies in the various institutions that receive support from public funds in Maryland. The University of Maryland has an unusually good distribution of students from each of the counties of Maryland. It also attracts students from a large number of other states, although the number from any one state is not large, with the exception of nearby states and the state of New York. Johns Hopkins University⁴ draws a surprisingly high proportion of its total enrollment (about 75 percent) from the City of Baltimore. Although some students come to Johns Hopkins University from Maryland counties, the number from every county is small, and the total from the counties comprises less than 3 percent of the Johns Hopkins enrollment. Most of the students from Maryland counties apparently attend on state scholarships. Johns Hopkins attracts students from almost every state in the Union, and the number from other states, particularly from those at some distance, such as California, Illinois, Michigan, and Massachusetts, is relatively large. This is not surprising in view of the national reputation which this institution enjoys for the strength of its program in certain fields of its study.

⁴ Johns Hopkins University could not supply the data on the form requested by the survey. The tabulations in Table 17 were made by the survey staff from a directory furnished by the University and were later verified by a University official.

TABLE 17

DISTRIBUTION OF UNDERGRADUATE ENROLLMENT FOR 1945-46 BY
COUNTIES IN MARYLAND AND BY STATES

Counties and States	Coppin	Bowie	Frostburg	Salisbury	Towson	Morgan	St. Mary's	University of Maryland	Johns Hopkins University	St. John's	Washington	Western Maryland
<i>Maryland Counties:</i>												
Allegany.....		3	68			4	1	74	8	3	3	16
Anne Arundel.....		10			15	22	7	102	10	4	9	11
Baltimore County.....		7			70	36	4	180	8	1	28	48
Baltimore City.....	117			1	106	621	15	655	2,961	11	64	105
Calvert.....		1		1	1			19			3	1
Caroline.....		3		6		6	1	19		1	12	6
Carroll.....		3		2		2	2	22	8	1	1	69
Cecil.....		6		6		2	3	15	1	2	12	6
Charles.....		4		3		6	5	22	2	1	2	5
Dorchester.....		5		8		8	1	29	7		8	5
Frederick.....		1	2		18	7	1	56	11	1	4	22
Garrett.....			12				2	14	2	2	2	7
Harford.....		8		3	14	10	3	48	6	4	7	16
Howard.....		3			2	2	1	37	2	1	2	9
Kent.....		2				12	1	7		1	62	1
Montgomery.....		2			8	6	3	428	13	6	12	21
Prince George's.....		14			5	9	8	487	6		4	8
Queen Anne's.....		6		6	1		1	11	2	3	21	5
St. Mary's.....		7	1	1	3		3	12	1		1	6
Somerset.....		12		15		13	1	26			5	5
Talbot.....		5		5	2	9	1	17	2	1	6	7
Washington.....			14		7		1	58	9	1	1	12
Wicomico.....		25		93		6	2	39	2		3	9
Worcester.....		5		6		4	2	6	3		7	7
Total from Maryland.....	117	132	97	156	265	785	69	2,383	3,064	45	279	407
<i>Other States:</i>												
Alabama.....						7		7	10			
Arizona.....							1	1	2			
Arkansas.....						3		3	5			
California.....						2		1	26	6	1	1
Colorado.....								1	5			
Connecticut.....					1	5		15	17	1	6	5
Delaware.....				6		4		8	6	1	9	16
District of Columbia.....	1					24	5	667	39	2	6	26
Florida.....						10		23	15		1	1
Georgia.....						5			15	1		1
Idaho.....									5			
Illinois.....						3	1	15	34	11		
Indiana.....							1	2	13	2		
Iowa.....						1		2	11	1		
Kansas.....								1	6			
Kentucky.....								4	5	2		
Louisiana.....									4	1		
Maine.....								1	6	1		
Massachusetts.....						2	2	14	31	3		3
Michigan.....								4	23	8		
Minnesota.....								1	3	1		2

TABLE 17—Continued

Counties and States	Coppin	Bowie	Frostburg	Salisbury	Towson	Morgan	St. Mary's	University of Maryland	Johns Hopkins University	St. John's	Washington	Western Maryland
Mississippi.....									4			
Missouri.....								6	7	1		
Montana.....									5			
Nebraska.....								1	4			
Nevada.....									1			
New Hampshire.....									7			
New Jersey.....					1	72	1	64	33	7	24	38
New Mexico.....								1	2			
New York.....			1			28	3	65	131	39	6	16
North Carolina.....	1					39		10	23	2		
North Dakota.....								1				
Ohio.....						5	1	12	40	3		1
Oklahoma.....									8			
Oregon.....								1	5			
Pennsylvania.....			2			41	1	72	116	10	10	43
Rhode Island.....								2	3	2		
South Carolina.....						5		2	6			1
South Dakota.....								1	2			1
Tennessee.....						3	1	3	6	2		
Texas.....						2		4	19	3		
Utah.....								2	2	1		
Vermont.....							1	1	3	1		
Virginia.....	3			1		68	4	90	50	6	1	10
Washington.....								3	5			
West Virginia.....			1			3		16	27			8
Wisconsin.....									14	2		
Wyoming.....												
Total Other States.....	5	0	4	7	2	332	22	1,155	806	120	64	173
Foreign Countries.....						2	3	11	91			3
Grand Total..	122	132	101	163	267	1,119	94	3,549	3,961	165	343	583

Each of the State Teachers Colleges for white students at Frostburg, Salisbury, and Towson apparently has a very well defined territory from which it draws; each serves a distinct group of counties with very little overlapping. The State Teachers College for Negroes at Bowie, on the contrary, obtains students from almost every county in the state. Coppin Teachers College, maintained by the City of Baltimore, obtains students only from Baltimore City. None of the state teachers colleges attracts a significant number of students from any other state.

Morgan State College obtains more than half of its students from the City of Baltimore, but the proportion of its Baltimore City students is less than the proportion at Johns Hopkins University. Morgan State College does not have all the counties in the state represented in its student body. This institution, however, attracts a very significant number of students from other states—an important indication of the nation-wide clientele which is served by Morgan State College.

St. Mary's Female Seminary has a surprisingly wide distribution of students from almost all the counties in Maryland. This institution also attracts a significant percentage of its total enrollment from other states, though the numbers involved are not large. Since this enrollment represents both the high school and college levels in this institution, it is not surprising that the freshmen show only a scattered representation from the county high school graduates of Maryland.

Data were not furnished by Princess Anne College with respect to the geographical distribution of its students, but the report concerning freshmen entering from the county high schools shows a fairly wide spread throughout the state.

St. John's College has a rather scattered representation from the Maryland counties. It has a higher percentage of its student body drawn from other states than any other state-supported institution in Maryland.

Western Maryland College draws somewhat more extensively than Washington College does from other states.

A special study was made of the geographical distribution of students enrolled in the College of Engineering at the University of Maryland in the autumn of 1946. These data are represented in Table 18.

More than one-third of the engineering students at the University of Maryland came from Baltimore City and Baltimore County. A little less than one-fifth of the total came from the District of Columbia, only one-twelfth of the total came from outside Maryland and the District of Columbia. Every county in Maryland is represented by one or more students in the College of Engineering, and the outside students come from twenty-five different states and three foreign

countries. If the enrollment from Montgomery and Prince George's counties is combined with that from the District of Columbia, as an indication of the total from the metropoli-

TABLE 18

GEOGRAPHICAL DISTRIBUTION OF ENGINEERING STUDENTS
University of Maryland, College Park
First Semester, 1946-47

Distribution	Number	Distribution	Number
<i>Maryland by Counties:</i>		<i>Out of State:</i>	
Allegany.....	31	Alabama.....	1
Anne Arundel.....	37	California.....	2
Baltimore City.....	456	Connecticut.....	2
Baltimore County.....	126	Florida.....	4
Calvert.....	3	Georgia.....	4
Caroline.....	5	Illinois.....	2
Carroll.....	9	Kentucky.....	1
Cecil.....	13	Maine.....	1
Charles.....	4	Massachusetts.....	2
Dorchester.....	8	Michigan.....	1
Frederick.....	21	Minnesota.....	2
Garrett.....	5	Nebraska.....	2
Harford.....	20	New Jersey.....	15
Howard.....	8	New York.....	21
Kent.....	2	North Carolina.....	2
Montgomery.....	164	Ohio.....	2
Prince George's.....	196	Oklahoma.....	1
Queen Anne's.....	7	Pennsylvania.....	27
St. Mary's.....	7	South Carolina.....	1
Somerset.....	2	South Dakota.....	1
Talbot.....	4	Tennessee.....	1
Washington.....	25	Texas.....	3
Wicomico.....	9	Virginia.....	27
Worcester.....	1	Washington.....	1
		West Virginia.....	2
Total.....	1,163	Total.....	128
<i>District of Columbia.....</i>	<i>314</i>		
		Distribution	Number Percentage
<i>Foreign:</i>		<i>Totals:</i>	
Bolivia.....	1	Maryland.....	1,163 72.3
Cuba.....	1	District of Columbia.....	314 19.5
Venezuela.....	1	Out of State.....	128 8.0
Total.....	3	Foreign.....	3 0.2
		Grand Total.....	1,608 100.0

tan area of Washington, it will be noted that this group comprises 42 percent of the total number of engineering students at the University of Maryland. The number from this area is

somewhat larger than the number from the Baltimore metropolitan area. This is to be expected both because the University is so located that it serves the Washington area more advantageously than the Baltimore area, and because of the high rate of employment of engineers in the service of the federal government.

An attempt was made in the survey, to obtain information regarding the geographical distribution of the alumni of the state-supported institutions of higher education in Maryland. This information would have been of value in determining the extent to which those who have received their collegiate education in Maryland institutions remain in the state. Unfortunately, most of the institutions were unable to supply the information requested. Only three have records that are set up in such a way as to yield the information readily. The data for these three institutions, Frostburg State Teachers College, Morgan State College, and Washington College, are shown in Table 19, in which the alumni are grouped into four periods according to the decade in which they received their degrees.

In each institution there is a trend for the alumni who received degrees before 1930 to be scattered more widely than the recent alumni. This is only natural because of the general tendency of the people of this country to move from one state to another after they have reached maturity. The alumni of the Frostburg State Teachers College have remained within the State of Maryland to a surprising extent, about seven-eighths of them being at present residents of Maryland or the District of Columbia. About 70 percent of the alumni of Morgan State College and 65 percent of the alumni of Washington College are still in Maryland or the District of Columbia.

ENROLLMENT TRENDS IN THE MARYLAND INSTITUTIONS OF HIGHER EDUCATION

In 1939-40, the last normal year of college operation before the war, the institutions of higher education in Maryland reported a total enrollment of 17,557 students. Of these, 37.6

percent were in institutions under public control, and 62.8 percent were in privately controlled institutions. The distribution of enrollments between publicly controlled and privately controlled institutions in Maryland differs sharply from that in the United States as a whole. In 1939-40 for the

TABLE 19

GEOGRAPHICAL DISTRIBUTION OF ALUMNI OF THREE STATE-SUPPORTED
INSTITUTIONS IN MARYLAND

GEOGRAPHICAL AREA	PERIOD IN WHICH ALUMNI WERE GRADUATED				
	Before 1920	1920-29	1930-39	1940-46	Total
Frostburg State Teachers College:					
Maryland and District of Columbia.	244	506	404	260	1,414
Virginia, West Virginia, Pennsylvania, Delaware and New Jersey.	46	41	29	5	121
Other Parts of the United States...	43	16	7	3	69
Foreign Countries.....	2	....	....	....	2
Total.....	335	563	440	268	1,606
Morgan State College:					
Maryland and District of Columbia.	340	287	445	410	1,482
Virginia, West Virginia, Pennsylvania, Delaware, and New Jersey.	78	79	102	85	344
Other Parts of the United States...	15	58	50	61	184
Foreign Countries.....	5	4	2	3	14
Total.....	438	428	599	559	2,024
Washington College:					
Maryland and District of Columbia.	185	102	294	198	779
Virginia, West Virginia, Pennsylvania, Delaware, and New Jersey.	61	43	114	39	257
Other Parts of the United States...	43	33	67	27	170
Foreign Countries.....	3	....	3	1	7
Total.....	292	178	478	265	1,213

United States as a whole, 53.3 percent of the students were enrolled in institutions under public control. If the privately controlled institutions maintain their same total enrollment and if the proportion of young people who attended publicly controlled institutions in Maryland were the same as in the rest of the United States, the publicly controlled institutions would have had 5,784 more students than were enrolled in 1939-40, an increase of approximately 80 percent above their actual enrollment. The total enrollments in all institutions

in Maryland would then have been 24,351, and in the state institutions 12,779.

The actual enrollments for 1946-47 seem likely to approach the figure projected above. It is impossible, of course, at this writing to obtain the final enrollments for the entire academic year 1946-47 to compare with the data of a previous year, but the enrollments in the autumn of 1946 alone indicate a total of 11,446 students in the eleven publicly controlled institutions of higher education now operated in Maryland. Complete data could not be obtained for the autumn 1946 for all the privately controlled institutions in Maryland, but by using estimates for two or three whose reports were lacking, it appears that the total enrollment in the privately controlled institutions is 11,522, almost exactly the same as the total for the publicly controlled institutions.

Although the autumn enrollments cannot be compared with the figures for the entire year, it appears now that the 1946-47 totals in publicly controlled institutions of higher education in Maryland will be at least 50 percent beyond the pre-war maximum while the privately controlled institutions will have only slightly more students in 1946-47 than in 1939-40. In other words, the proportion of total college enrollments in publicly controlled institutions of higher education in Maryland will, in 1946-47, be approximately the same as those for the country as a whole were in 1939-40. In the meantime, however, the publicly controlled institutions in other states have probably also increased more rapidly than the privately controlled institutions, so that Maryland is doubtless still providing, through publicly controlled institutions, a smaller proportion of the higher education required by its citizens than is typical for the country as a whole.

Although Maryland has lagged behind the rate of the United States in the percentage of its young people going to college, as shown by preceeding tabulations in this chapter, the trends between 1929-30 and 1939-40 indicate that enrollments in Maryland institutions were increasing more rapidly than in the United States as a whole. For the country as a whole, the increase in total college enrollments in the decade

of the '30's was 35.8 percent. The institutions of higher education in Maryland increased their enrollment by 42.7 percent in this same period. These enrollments refer to both publicly and privately controlled institutions combined.

For the purposes of the survey, data were requested from each institution regarding enrollment trends since 1930. For the decade of the '30's data were collected at three-year intervals, and then for each year since 1939-40. Table 20 shows the trends in enrollments for eight of the state-controlled institutions. Princess Anne College did not furnish the data as requested.

TABLE 20
ENROLLMENT TRENDS IN PUBLICLY CONTROLLED INSTITUTIONS OF
HIGHER EDUCATION IN MARYLAND

Institution	1930-31	1933-34	1936-37	1939-40	1940-41	1941-42	1942-43	1943-44	1944-45	1945-46	Autumn 1946
Coppin Teachers College	139	109	154	148	157	184	168	130	134	122	129
Bowie State Teachers College.....	99	99	116	131	150	155	120	109	110	131	131
Frostburg State Teachers College.....	161	116	131	222	221	195	144	95	67	77	235
Salisbury State Teachers College.....	165	114	201	273	221	209	255	196	138	202	242
Towson State Teachers College.....	646	460	459	571	511	419	334	287	236	267	458
Morgan State College..	593	664	742	1,089	1,094	825	719	667	1,068	1,314	1,305
St. Mary's Female Seminary.....	76	73	84	75	71	81	85	79	90	90	89
University of Maryland.	3,028	3,404	3,720	5,214	5,629	5,658	5,340	5,601	4,367	6,083	8,427
Princess Anne College..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	154
Montgomery Junior College.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	186
Hagerstown Junior College.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	90
Total.....	4,907	5,039	5,607	7,723	8,054	7,726	7,165	7,164	6,210	8,286	11,446

The total enrollments in the eight institutions increased rapidly from 1930-31 until a peak was reached in 1940-41. Like most of the institutions in this country, the numbers of students declined sharply during the war, reaching a low in 1944-45 approximately 23 percent below the pre-war peak. There was a much smaller decrease in enrollments during the war in the Maryland institutions of higher education than in the country as a whole; the total enrollments for college stu-

dents in the United States decreased approximately 50 percent during the war period.

The trends of enrollments in various institutions do not follow the same pattern. The heaviest decrease in enrollments during the war, as shown in Table 18, were in the state teachers colleges for white students. The enrollment at Frostburg declined 70 percent, and the declines at Salisbury and Towson were approximately 50 percent. At the three Negro institutions the decrease ranged between 30 and 40 percent. The University of Maryland showed an enrollment decline of only 20 percent from the pre-war peak. At St. Mary's Female Seminary there was very little change in the enrollments during the war.

PROBABLE TRENDS IN NUMBERS WANTING TO ATTEND COLLEGE

In order to plan wisely for the development of higher education in Maryland it is necessary to have some estimates of the numbers of young people who will probably want to attend college. The factors that enter into such an estimate are complex and, like any other prophecies, are subject to many errors of interpretation.

For the country as a whole reports indicate that in the autumn of 1946 slightly more than 2,000,000 students were attending institutions of higher education. This compares with the pre-war maximum at the corresponding date in the autumn term of approximately 1,350,000. Thus the enrollment in the autumn of 1946 in American institutions of higher education has increased 50 percent beyond the maximum pre-war enrollment. The figures for the Maryland institutions have not been gathered on a comparable basis, but the indication is that the increase in this state has not been as heavy as the average for the whole country. Relatively large increases have occurred this autumn at the University of Maryland. At most of the privately controlled institutions of higher education enrollments have increased somewhat, but not at a rate that corresponds to the total increase throughout the country. Among the state teachers colleges, only

Frostburg has reached the pre-war maximum enrollment. The addition of two new publicly controlled junior colleges has thus far increased the enrollments of students in Maryland by less than 300.

The outstanding factors that have caused the great increase in college enrollments throughout the country in the autumn of 1946 have been the return of men and women who were in the armed services and the provisions for financing their continued education from federal funds. Throughout the country almost half the students enrolled in the autumn of 1946 are veterans. One important element in the forecast of future enrollment trends is the extent of the service that will be required for veterans attending under Public Laws 16 and 346. Information released by the Veterans Administration in Washington indicates that, in addition to the more than 1,000,000 veterans who are attending colleges and universities this autumn, there are 2,500,000 to whom certificates of eligibility for education have been issued who have not yet entered upon training. A sample check of this latter group indicates that probably half of them still expect to enter an institution of higher education. Furthermore, certificates of eligibility are still being issued at a rapid rate. Everyone being discharged from the armed services and everyone now serving in the Army and the Navy is entitled to educational benefits upon discharge. Furthermore, the evidence seems clear that the veteran students will have a higher rate of retention than regular students. This will be partly due to the fact that they are relieved, to a considerable extent, of economic pressure and also because of their greater maturity and seriousness of purpose. In every comparison that has been made the veterans have been shown to be maintaining an academic standing fully equal or superior to that of the nonveteran students.

After a review of the pertinent data, the Veterans Administration has estimated that the enrollment of veterans in colleges and universities will continue to increase for at least two more years and will not begin to decline appreciably until after 1950. Since veterans have nine years after their

discharge or after the termination of the war (whichever is latest) to complete their period of training at government expense, the load of veteran students will continue to be significantly heavy until 1955.

Although the increases in enrollments in the autumn 1946 have been caused chiefly by the influx of veterans, the fact must not be overlooked that there has been a substantial increase in the number of nonveteran students. This increase would doubtless have been much larger if it had not been for the priority which most institutions gave to veterans when enrollments were approaching the maximum limits permitted by the available facilities. The increases in nonveteran students have come in a time of almost unparalleled peacetime employment, with the number of unemployed very low over the country as a whole. Undoubtedly if employment opportunities decline, as many economic prophets think they will, a considerable number of young people will decide, as they have usually done in the past, to attend college rather than join the ranks of job seekers.

There is, furthermore, a very definite increase in the number of young people attending high school and an improvement in the number who remain in high school until graduation. By the time the peak load of veterans in higher institutions is past, the number of high school graduates who want to go on to college will be increasing sharply. Present estimates indicate that, as veteran students begin to decrease in number by 1950-51, their places in the colleges and universities will be filled by an even larger number of young high school graduates who wish to continue their education. Experience following World War I, when a comparatively small number of veterans were given educational benefits because of service-connected disabilities, shows that the influence of such a broadening of opportunities for higher education extends far beyond those who are immediately served. It may be confidently expected that, as veterans complete the period of education to which they are entitled, they and their friends will be insistent that the younger brothers, sisters, nephews, nieces, and cousins shall have similar opportunities. These

veterans may confidently be counted on to expect full opportunities for education for their own sons and daughters.

By 1957-58 another factor will be felt in the enrollment situation. The birth rate in this country began to increase sharply before the war and has remained at a high level ever since. The public schools are just beginning to feel the effects of this increased birth rate in the numbers of children entering the first grade. These youngsters will be ready for college in a dozen years from now and the number of people in the college-age group will remain high for at least six or seven years thereafter and for as much longer as the present high birth rate continues. Thus, by the time the colleges have absorbed the increased load of high school graduates who will want to continue their education, a new wave of increased enrollments will be rolling in, due fundamentally to the increase in the birth rate.

The foregoing analysis has been concerned only with requirements of higher education for citizens of the United States. There is at this time a greatly increased demand from foreign countries for the privilege of attending American institutions of higher education. To some extent this demand is limited by economic conditions in the foreign countries, but as the world economy becomes stabilized, the number of foreigners who will be coming to the United States for higher education will be much larger than ever before in the history of the country. Doubtless there will also be many Americans who will want to attend foreign universities; but because of the destruction of many of the most important centers of learning in central Europe during the war and because of the limited number of outstanding universities in Central and South America, the number of Americans who travel abroad for higher education will in all probability be much smaller than the number of foreigners coming to the United States for similar purposes.

A summary of the future prospects for college enrollments indicates that preparation needs to be made immediately for continued increases in the number of students accommodated in American institutions of higher education. Institutions

during the summer and autumn of 1946 strained their resources beyond anything they ever dreamed was possible in order to care for the unprecedented demand for college attendance. That the institutions will have to continue to increase their already strained resources is clear. That Maryland institutions will share this general trend in enrollments also seems clear. In fact, because this state has, in the past, lagged somewhat behind other states in the provision of higher education, it may be confidently expected that, if proper facilities are provided, the increases in the demand for higher education in Maryland will outstrip those of the country as a whole.

The trends thus far have been discussed in terms of total enrollment. It is already evident that students today are selecting their courses of study along somewhat different lines than the students of pre-war years. In the current year the demand is heaviest at the freshman and sophomore levels. Assuming that there is a normal retention of students (and as previously indicated, the retention of veterans will probably be greater than normal), a great load will be thrown on the programs in the upper divisions and professional schools within another year or two.

Certain types of professional schools are attracting much larger numbers of students than ever before while other curriculums are relatively less in demand. Engineering and business are being chosen by a far larger proportion of students than ever before in history. Curriculums for the preparation of teachers throughout the entire country have attracted even fewer students than in pre-war years. The latter trend might be changed (indeed it must be changed) by taking appropriate steps to make teaching a more attractive profession. The planning for future facilities needed for higher education in the United States must take into account these differential requirements in the various curriculums as well as total requirements for numbers of students to be educated.

NEEDS OF THE STATE OF MARYLAND FOR
COLLEGE-TRAINED PEOPLE

As stated earlier in this chapter, the extent to which the state should provide facilities for higher education is determined, in part, by the demands of the population for instruction at the college level. The preceding sections of this chapter have analyzed extensively the available data concerning this approach to the problem of the facilities needed in the State of Maryland. The other approach to the needs of the state for higher education, as was indicated earlier, is through an analysis of the demand of the economic and social order for personnel who have had college or university education. Objective data that would throw light on this question seem to be almost unavailable at present, and the survey has had to rely on the informed opinion of those who are familiar with supply and demand in the various professional and occupational fields for which college training is required.

In analyzing the needs of the state for the service of people with college training, it must be remembered that state boundaries may mean little with respect to place of training and place of service. For example, some states have no medical school within their boundaries, yet they are not without physicians and surgeons. The supply of practitioners in any profession within a state is determined more by the conditions under which a competent person can practice his profession than by the location of training facilities. Probably Maryland could have an adequate supply of lawyers, doctors, engineers, and other professional people without a single institution in the state to prepare such practitioners if the state only could offer opportunities that are attractive to the practitioners of the various professions. In fact, because of the competition with other states, the presence of an effective program of higher education will not alone serve to keep within the state an adequate supply of professional people in any field, with the possible exception of beginning teachers. Because of this circumstance the State of Maryland needs to look at its situation as a part of a national

picture. The state should aspire to prepare in the various professions not less than its fair share of the practitioners needed to serve its population. This is a moral obligation which cannot be enforced except by the conscience of the state with respect to its responsibilities to the nation as a whole.

With the foregoing reservations in mind, attention may be given to probable demands in certain professional fields.

Engineering

At the request of the survey staff, Professor Abel Wolman of The Johns Hopkins University has prepared the following analysis of the needs for college-trained engineers.

You will recall that some weeks ago before I left for Venezuela, you asked me to consider the important question of the probable number of engineers required for the private and public operations of the State of Maryland and the immediate vicinity. I have given the matter a great deal of thought and have instituted a number of inquiries in order to lend some quantitative weight to my tentative conclusions. The inquiry discloses, as we might have anticipated, that any authoritative prophecy is beset with any number of reservations and risks. Unfortunately, no thoroughgoing review of the areas of demand for engineers has so far been made in the State of Maryland. It would take many months to carry it out, even though all of us might agree that the results would be highly profitable.

In the absence of such a detailed study, I have fallen back upon the following general observations which I hope may be of some usefulness to you.

1. In the September 1946 issue of the *Journal of Engineering Education*, the Committee on The Outlook in the Demands for and Supply of Engineering Graduates estimates a need conservatively for approximately 23,000 engineers per year for the next four years. This estimate represents a conservative requirement for the country as a whole.

The 125 private companies which the Committee canvassed also indicated a net increase since 1938 of the number of engineers employed by them. These same

companies estimate that for the next few years at least, annual increases will amount to about 17 percent of the present employment. Upon this basis, inasmuch as there were 246,000 engineers employed in 1940, the private companies' requirements alone would represent about 31,800 engineers each year instead of the conservative estimate of 23,000 made by the Committee.

Assuming that the actual requirement will be somewhere between these two figures, I have taken an overall figure of 25,000 required graduates for some years to come. Upon the basis of the ratio of the population of Maryland to the whole of the country this would mean that Maryland would be called upon to produce at least some 370 graduates annually and not including those on the level of masters or doctorates in engineering.

2. The figure of 370, of course, is an underestimate because of the fact that the engineering schools in Maryland not only provide training for students from Maryland, but must have a reasonable nucleus of out-of-state students for reasons of sound education cross-fertilization. It so happens that engineering schools of Maryland have a great opportunity to provide training for individuals who are in high demand in the adjacent areas of the District of Columbia, Virginia, West Virginia, and Delaware. These demands would increase the estimate beyond the simple proportion established by the Maryland population ratio to the rest of the country.

3. A further increase would be required by virtue of the fact that we are 40 miles from the seat of the national government where demands for engineering services of high technical character are completely disproportionate to the population of the area itself.

4. It should be pointed out likewise that Maryland's position in the country as a whole with respect to industrial production is ninth whereas its position in relation to population is eleventh⁵. This gives further justification for the belief that the estimated demand on a country-wide basis of relative population, as applied to the specific problem of Maryland, is too low.

5. If we add to this estimate the fact that we are already confronted with training some 100 graduate students in engineering this year, with the prospect of this

⁵ According to the *U.S. Census, 1940* Maryland ranks twenty-eighth among the states in total population. This correction only serves to emphasize the point being made by Professor Wolman.

being materially exceeded in subsequent years, the figure again becomes too low.

6. We have tried to obtain from some of the major industrial companies in the City of Baltimore some indication as to their annual requirements. These estimates refer primarily to their demand for professional engineers.

The Baltimore and Ohio Railroad, for example, estimated that they have an annual demand for some 30 engineers. The Bethlehem Steel Company indicates a comparable requirement. The Glenn L. Martin Company could use some 240 additional professional engineers.

Western Electric Company, Bartlett Hayward, Davison Chemical Company, and the Gas and Electric Company indicate an immediate requirement of between 75 and 100.

The difficulties involved in any of these estimates may be illustrated by the fact that the Glenn L. Martin Company alone now employs 2,400 engineers and technical specialists. Mr. Martin indicates that in the near future his requirements will exceed 3,000. The total employment of this company is 18,000. Yet in 1940 the employment was probably in the neighborhood of 5,000.

The Bethlehem Steel Company is at present enlarging its plants at Sparrows Point so as to employ in 1947 somewhat over 25,000 people. Its employment in 1938 was in the order of 8,000.

We are reliably informed that programs are now under way to make Baltimore the seat of radar equipment research and manufacture. The Westinghouse Company, for example, has recently announced that it is now ready to construct such facilities here, where they were nonexistent before.

It is apparent, therefore, that any estimates currently made, based on 1940 requirements, at least for the State of Maryland, are likely to be completely unreal.

7. The demand for engineering graduates is unlikely to move downward after 1950 in spite of the intermediate peak load under the GI Bill of Rights. The recently released estimates by the Census Bureau for the population of the United States from 1950 to the year 2000 are completely contrary to the dismal prophecies of 1938. It now appears that the growth of the United States will be consistently upward to approximately 1990, with prob-

able population to be attained at that time of about 165,000,000. This is a complete reversal of the expectancies estimated prior to 1940. With each unit increase in population, the demand for engineers rises, because of the increasing complexity technologically of the activities of this country. All of our industrial employment estimates made in 1944 have been greatly exceeded.

8. This situation may be illustrated by the fact that today it is estimated that some 400,000 scientific workers are engaged in one phase or another of nuclear physics work. Ten years ago this particular field of activity accounted for only a handful of scientific workers.

9. Nowhere in these estimates has account been taken of the demand in foreign service for American engineers. It is large and will become even greater in the next ten years.

10. The great demand for junior colleges gives popular expression to the universal plea, verified by GI polls, that technological training be increasingly afforded to our youth. These colleges appear to me to be great feeders for university applicants.

I realize, of course, that all of these comments are qualitative in nature, but they seem to me to lead to the positive conclusion that demand for engineering graduates is on the increase to make up for the backlog during the war years, to provide for expanding industrial and public services, to provide for an expanding population for at least the next forty years and to provide for the development of new scientific and industrial processes. I might venture the prophecy that the demand for engineering graduates from Maryland schools is likely to exceed 500 a year for many decades to come.

I know that you will accept my comments solely in the light of the desire to give you the best judgment available, in the absence of a truly prophetic sense.

The report in the *Journal of Engineering Education*, to which Professor Wolman alludes in his statement, expressed the conviction that, with facilities crowded to the utmost, the institutions would be unable to catch up with the demands for trained engineers until about 1952. The greatly increased enrollments that have been reported this autumn in engineering colleges over the country have surprised even the educators in this field. Almost every engineering college has

considerably more students than it reported as its maximum possible capacity, when the study of supply and demand was made. A very recent analysis indicates that the increased enrollments this autumn may enable the engineering colleges to catch up with the backlog of demand more rapidly than had been anticipated. But at least during the next four years, while the present large freshman class is going through its period of education, there will be need for maximum utilization of present facilities and for their extension wherever possible. What the needs will be beyond this period is difficult to ascertain, but if it can be assumed that production in this country will continue at something like the present high levels, there will be plenty of opportunity to absorb all the graduates that the engineering colleges can produce.

In addition to the demand for fully trained engineers there are very significant needs for greatly increased numbers of technicians who have had perhaps two years beyond the high school but less than the full four-year engineering curriculum. A study published by the U.S. Office of Education⁶ two or three years ago pointed out that, whereas in the early 1930's industry employed an average of about two persons with technical training of two years or less beyond high school for each graduate engineer employed, in the 1940's the ratio had risen to four or five to one, and in some industries the ratio was even higher. This bulletin by the U.S. Office of Education pointed sharply to the need for a great expansion of training opportunities for men and women who will take jobs that do not require the full four-year degree program, but do require some preparation beyond the high school. The State of New York, for example, has embarked upon a large scale program for supplying such training for its people.

Another trend in engineering education, to which Professor Wolman alludes in his statement, is the increased requirement for graduate preparation beyond the regular four-year curriculum. It is entirely probable that the demand for men

⁶ *Vocational-Technical Training for Industrial Occupations*, Vocational-Technical Training Series No. 1, Vocational Division Bulletin No. 228, U.S. Office of Education (Washington: Government Printing Office, 1944).

with master's degrees in engineering may come to be as great as the demand formerly has been for graduates of the four-year program. The great demand for research technicians and the increasing needs for faculty members in the engineering colleges require increasing numbers of engineers trained at the doctor's level.

There is an important movement, furthermore, to extend the engineering curriculum to a five-year period instead of concentrating it in four years. This extension is advisable not only because of the increased technical content that seems necessary but also to provide graduate engineers with a better general or liberal education so that they may have competence, not only as technicians, but also as educated persons in a modern society. The extension of the program to a five-year period would increase by more than 25 percent the number of students who would need to be enrolled to produce a given number of graduates.

Dr. Wolman rightly leans to the opinion that he has been conservative in his estimate of the needs of Maryland for 500 engineer graduates annually. If the figure of 500 graduates each year is taken as a basis of calculation, however, and if it is assumed that the four-year curriculum will be continued and will have approximately the usual rate of "attrition" throughout the course, the total enrollments that would be needed to produce the 500 or more engineer graduates per year would probably be from 2,600 to 2,800 students. In the University of Maryland and The Johns Hopkins University schools of engineering in pre-war days, the total enrollment reached a peak of approximately 1,200. Even with the unbelievable expansion that has occurred this autumn, the combined enrollment in the two institutions is several hundred short of the number required to produce 500 graduates annually.

The evidence is very clear that, with all the expansion that is likely to occur in institutional facilities, the engineering colleges in Maryland will still not be producing enough graduates to supply the demands in this field for many years to come.

Nursing

The survey staff held a conference with two representatives of the nursing profession, Miss Mowbry and Mrs. Shipley, of the Nursing Headquarters of the State Board of Nursing Examiners. These conferees pointed out that the average length of service in nursing is only five years after preparation is completed. This necessitates a heavy load of replacement training. The conferees indicated that the nursing schools have had difficulty in recruiting a sufficient number of new students to fill their enrollments. There does not seem to be at present any crying need for increases in the facilities for preparation of nurses in Maryland. What is needed is an improvement in the quality of the preparation that is offered. The Committee on Accreditation of the National League of Nursing Education recognizes Johns Hopkins, Union Memorial, Sinai, and Sheppard-Pratt schools, all of which are in Baltimore; it does not recognize the School of Nursing of the University of Maryland.

Teaching

At present there is an appalling shortage of qualified teachers who are willing to remain in the profession under prevailing working conditions and salaries. This shortage is not due to any lack of facilities for the preparation of teachers in Maryland or in most of the other states of the country. In Maryland this autumn, despite the great pressure on college facilities generally, the institutions specially devoted to the preparation of teachers could accommodate many more students than they have enrolled. The chief reason why there are not sufficient qualified teachers to staff the classrooms in this country is that working conditions and salaries are not attractive. Until a general improvement occurs in the salaries paid teachers, as compared with incomes available in other occupations requiring equal preparation and ability, it may be expected that the schools will be inadequately supplied with teachers.

Most of the state teachers colleges in Maryland lack proper dormitory facilities for men students. In view of the

great desirability of attracting more men into the teaching profession, it would be advisable to provide modern dormitories for men in the teacher training institutions which do not have them.

The general indication is that for a long time to come the United States will not have enough well-prepared teachers to care adequately for the needs of the public elementary and secondary schools. Under present conditions there seems to be no immediate probability of preparing an oversupply of teachers. The problem is rather one of effective recruiting among qualified young people in order to get a sufficient number to enter upon preparation for teaching.

Medicine

Medicine is a profession which requires long and very expensive preparation. There are differences of opinion with regard to the number of medical practitioners needed in the country today. Everyone admits that there are areas, chiefly in the rural regions, where the supply of doctors is very inadequate. For the country as a whole, however, statistics indicate that the United States has more licensed medical practitioners in proportion to its population than any other country in the world.

In general, the medical profession has taken a position that the needs are not for the production of more qualified physicians and surgeons each year, but rather for an improvement in the quality of preparation, for expansions of hospitals and clinics, and a better distribution of such facilities over the country. With adequate hospital facilities, one well-qualified medical man can care for a much larger number of cases and can care for them much better than he can where such facilities are not available.

There is a contrary opinion to the effect that, even with improved hospital and clinical service, it would be advantageous to increase the number of medical practitioners. It is pointed out, for example, that during the war the demands of the Army and Navy made it necessary to increase considerably the number of medical graduates produced annually.

Since the war the medical schools have reduced their rate of production and have gone back in general to their pre-war quotas. Some have raised a question whether the needs of medical service which were so evident in wartime are not equally pressing for effective peacetime service.

There is an enormous demand among young people for entrance to medical schools, and probably not more than one or two Maryland residents out of ten who would like to study medicine will have opportunity to enter a medical school. The problem of whether or not the number of medical graduates annually produced in Maryland should be increased is a question that needs extended study. The two medical schools in the state—at the University of Maryland and at Johns Hopkins University—have their limits on enrollment rather definitely fixed by the facilities that are available. Because of the great expense that would be involved in increasing or extending these facilities to accommodate more students, it does not seem wise to assign high priority to such a program at this time. Substantial funds for improvement in the present provisions for the preparation of medical practitioners should have priority over increases in the number of medical students.

Law

There seems to be no problem concerning the number of lawyers that need to be educated in the State of Maryland. The pre-war rate of production seems adequate for the needs of the state, and no extension of the present facilities in this field seems warranted at present.

Business

It is only in relatively recent times that business has been recognized as a profession for which education at the college level is desirable or necessary. Under present conditions, however, business requires a vast number of employees who should have preparation beyond the secondary school in order to render effective service. Furthermore, there are a

large number of small businesses in which the proprietor should have a thorough basic preparation in such fields as economics, accounting, and management in order to be successful. The rate of bankruptcy among small businesses is alarmingly high even in normal times; most of these failures could be prevented by adequate education.

Fortunately, preparation for the field of business is not as expensive per student as preparation for other professional fields such as medicine and engineering. The facilities required for instruction in business are much like those for the liberal arts courses, and while some specialized equipment such as typewriters and calculating machines is required, this does not run into heavy expenditures such as are required for equipping programs of study for some other professional fields.

The survey staff has not made any detailed analysis of the needs of Maryland for people prepared in the fields of business, but the trend indicates that it would be highly desirable to expand considerably the facilities for preparation in this field.

Liberal Arts and Sciences

The foundation of all professional preparation, as well as the basic requirements for good citizenship and for a satisfying personal life, rests upon a solid base of instruction in the arts and sciences. It is difficult to translate the demands for instruction in the liberal arts into "needs" or "requirements," from the standpoint of a state as a whole, because in general there can be no overproduction of preparation in these fields, such as can happen in specialized professional fields. A state can never have too many people who are well informed about government, economics, history, literature, music, art, psychology, philosophy, and all the other liberal arts and sciences. The limits in the provision of such preparation are determined more by what society can afford than by any apparent ceiling on what it can absorb. Lower limits are determined by the necessary requirements in the liberal arts for students preparing for the professions, but beyond

these lower limits it is advisable for the state to provide opportunities for just as many as possible of the people who have the capacity or the motivation to continue their studies at least through the program of the bachelor's degree.

FALLIBILITY OF FORECASTS OF NEEDS FOR HIGHER EDUCATION

Any analysis of the needs of a state for college-trained personnel is clouded by the inability to foresee what the demands are likely to be in the future, at a time when new generations of college people are ready for employment. The conditions in industry and technology change so rapidly in these times that they tend to outstrip by far the efforts of the institutions to keep up with new demands for training. One can hardly foresee, for example, how the scientific discoveries about nuclear fission and atomic energy will affect the demands for people with college training, but the effect can scarcely be anything else than an enormously increased demand for advanced study and preparation.

In a very real sense the provision of training for increased numbers of people creates a demand for increased training. Intelligent persons with good basic preparation tend to create new jobs and new occupations by demonstrating that they are prepared to render services the value of which was never before adequately realized. A man trained in engineering may invent a new process which calls for the services of new kinds of technicians who were never before employed. As better preparation is offered in the field of medicine and as more research is done on medical problems, the number of medical practitioners needed to supply services that then come to be "required" by the population also increases at a rapid rate.

The recent war has brought vividly to the attention of American leaders the shortages that have existed with respect to people with various types of technical and scientific education. It has been suggested that it would be wise during peacetime to follow the policy of "stock-piling" technical competence as well as critical materials that might be needed

in the event of another war. In other words, the limits on the amounts of preparation that should be given are not determined entirely by the peacetime needs of the country, but in part at least by the unforeseeable potentialities of great national emergencies.

The foregoing considerations indicate that, whatever forecasts may be made on the basis of the present ability of the economic order to absorb professionally trained people, the results are likely to be too conservative. As the number of well-prepared positions increases, the needs for the services of such people seem as a general rule to increase even more rapidly. The general conclusion may be drawn that within the limits of any provision which the State of Maryland is likely to make for higher education there is little likelihood of any significant overproduction. The best check on overproduction is through the choices made by the students themselves, who can readily be advised to stay out of lines of preparation that seem at the time to be overcrowded. In so far as students are willing to spend their time and energy in the preparation of various professions, the state should be willing to provide the opportunities for that preparation.

NEEDS OF THE STATE FOR RESEARCH THROUGH INSTITUTIONS OF HIGHER EDUCATION

The foregoing considerations have related chiefly to the needs for instructional facilities in the various professional fields and the liberal arts. In addition to the instructional services the state looks to its institutions of higher education and especially to its university for research and investigation leading to new knowledge and new processes.

Any well-managed industrial concern in modern times has a research division which is liberally supported. Most of the research that is carried on in industry is concerned with immediate, practical problems. There is another type of investigation sometimes called "fundamental research" which concerns itself with problems that do not seem to have any immediate practical application, but which in the long run may produce profound effects on industry and technology.

For example, when the earlier experiments were undertaken on nuclear fission, few people had any idea of the tremendous results that would follow upon the solution of this highly theoretical problem; in fact, even today, we have scarcely begun to realize the effects of these discoveries on modern life. Research of this fundamental or theoretical type must, to a large extent, be carried on through universities or other agencies of government. Industry inevitably, to a considerable degree, limits its research activities to the solution of problems that will affect profits and dividends.

There are many types of research, moreover, which are of little or no concern to industrial organization or to profit-making enterprises, but which are of vital significance to the welfare of the state and its people. Examples of this type of research are found especially in the fields of social sciences such as economics, political science, sociology, and education. Provisions for research in these fields must almost necessarily be made through the universities.

The State of Maryland has given very little support to research in its institutions of higher education. Only one of the state-controlled institutions—the University of Maryland—even acknowledges research as an important function. The University has been most meagerly supplied with resources from which to organize the necessary staff and equipment for a sound and effective program of research. In spite of limited facilities, the University has a program of research under way in many significant fields.

Any university is likely to become a mere teaching institution. Reports of increasing numbers of students served and numbers of instructors employed are impressive and objective signs of growth and are likely to be interpreted by legislatures as requiring approval of requests for increased funds. Most research, on the contrary, is not spectacular, and the results of the best research are often not evident for a long period after the expenditure has been made. For these reasons a university administration needs to have particular concern to see that its research program is not overshadowed by the demands for instructional services. Merely for the

state to provide additional funds to the University of Maryland for research purposes would not be sufficient to produce the desired result. The University must maintain an organization for fostering research which will zealously guard the resources provided for that purpose to the end that they may produce the most effective results. This is a function that cannot be assigned to any agency outside the University, for no control through a State Budget Commission or a State Employment Commission or any other agency can insure the production of research within a university. It is only when an atmosphere conducive to research is maintained and only as the group of research workers within the institution themselves have the active support and encouragement of the university administration, that the desired results can follow from the provision of suitable supporting resources for a research program.

THE PROBLEM OF SEPARATE INSTITUTIONS FOR NEGROES⁷

By social custom, rather than legal provision, Negroes and whites in the State of Maryland attend separate institutions of higher learning. Within the past few years, however, this rigid pattern of racial separation has begun to relax. As a direct result of the Murray case, Negroes attend the School of Law of the University of Maryland (it is reported in the press that in the autumn of 1946 approximately twenty Negro students are enrolled), and there are a few Negro students attending Johns Hopkins University. By and large, however, Negro students attend Negro colleges.

There are four Negro colleges in the state, all of which are under public control and three of which are state institutions: Morgan State College, located in Baltimore City, is an undergraduate liberal arts college; Princess Anne College, located in Somerset County, is nominally a branch of the University of Maryland and is designated as the land-grant college for Negroes; the Maryland State Teachers College at Bowie, situated in Prince George's County, is the state institution for

⁷ This section was prepared by a special consultant to the survey staff, Dr. Martin Jenkins, professor of education, Howard University.

the preparation of elementary school teachers; and Coppin Teachers College, a municipal teachers college located in Baltimore City, prepares elementary school teachers primarily for the Baltimore schools. None of these schools is equal in quality to the corresponding institution maintained for the white population.

Although the state maintains extensive facilities for the graduate and professional education of white persons, there is no provision for the equivalent training of Negroes in the state. In an attempt to alleviate this condition, the state has established a scholarship fund to enable Negro students to attend out-of-state institutions for graduate and professional training.

The Negro Population

In 1940 there were 301,931 Negro residents in the state; they constituted 16.6 percent of the total population. In an earlier section of this chapter Table 3 presented the distribution of the white and Negro populations in the various counties in Maryland. From that table it is to be observed that Negroes constitute varying proportions of the population of the several counties, ranging from 46.5 percent in Calvert County to less than one percent in Garrett County. The Negro population is predominantly urban (61.9 percent), and the largest population cluster is in the Baltimore area (67.2 percent), and especially in Baltimore City (54.6 percent).

If the population of college age be estimated as one-half the population age-group fifteen to twenty-four years, there were 27,812 Negroes, 16.8 percent of the total, of college age resident in the state in 1940. Drawn from this population there were 1,030 Maryland students enrolled in the colleges of the state in 1945. In 1944 approximately 33 percent of the graduates of the Baltimore high schools and 20 percent of the graduates of the county high schools attended college. The distribution of these students by college and by section is presented in Table 21. Table 22 summarizes the total attendance of Maryland Negroes in the four colleges and compares the number from each area with the total Negro population of

the area. It is to be observed that the Baltimore area furnishes approximately four-fifths of the total Negro college enrollment, though only two-thirds of the total Negro population is in that area.

TABLE 21

NUMBER AND PERCENTAGE OF NEGROES ATTENDING NEGRO COLLEGES
FROM THE DIFFERENT AREAS, 1944-45

AREA	MORGAN STATE COLLEGE		BOWIE STATE TEACHERS COLLEGE		PRINCESS ANNE COLLEGE		COPPIN TEACHERS COLLEGE	
	Num- ber	Per- centage	Num- ber	Per- centage	Num- ber	Per- centage	Num- ber	Per- centage
Baltimore Area.....	624	91.5	32	23.9	22	20.6	130	100.0
Eastern Shore.....	40	5.9	35	40.3	58	54.2	0	0
District of Columbia Area...	6	0.9	25	18.7	13	12.1	0	0
Southern Maryland.....	6	0.9	15	10.9	13	12.1	0	0
Western Maryland.....	6	0.9	8	6.2	1	0.9	0	0
Total.....	682	100.0	115	100.0	107	100.0	130	100.0

TABLE 22

TOTAL NEGRO POPULATION AND NEGRO COLLEGE ENROLLMENT
FOR FIVE AREAS OF MARYLAND

AREA	TOTAL POPULATION		ATTENDANCE AT FOUR MARYLAND NEGRO COLLEGES		PERCENTAGE COLLEGE ATTENDANCE OF TOTAL NEGRO POPULATION
	Number	Percentage	Number	Percentage	
Baltimore Area.....	202,973	67.2	804	78.1	0.40
Eastern Shore.....	49,217	16.3	133	12.9	0.27
District of Columbia Area	25,113	8.3	44	4.3	0.18
Southern Maryland.....	16,832	5.6	34	3.3	0.20
Western Maryland.....	7,796	2.6	15	1.4	0.19
Total.....	301,931	100.0	1,030	100.0	0.34

Economic Status

The great bulk of the Negro population of the state is found in the lowest paid occupations: unskilled and semi-skilled labor, domestic service, and farm labor. Recent statistics relative to the occupational and income pattern of the Negro population of the state are not available. An idea of

the economic level from which the Negro college students of the state are drawn is provided, however, by data recently assembled at Morgan State College. This study, which was based on student reports, revealed that the average income of the parents of Morgan College freshmen in 1946 was less than \$2,000 per year, despite the fact that in almost half the cases both parents were employed. Shown in Table 23 is a distribution of the occupations of the fathers of freshmen students at Morgan College in 1946.

TABLE 23

OCCUPATIONS OF THE FATHERS OF FRESHMEN AT MORGAN STATE COLLEGE, 1945-46

Occupation	Frequency	Occupation	Frequency
Laborer.....	38	Plumber-Carpenter.....	2
Farmer.....	12	Railway Mail Clerk.....	2
Factory Worker.....	11	Barber.....	2
Carpenter or Painter.....	9	Undertaker.....	2
Chauffeur.....	8	Real Estate Agent.....	2
Shipyard Worker.....	7	Railroad Clerk.....	2
Merchant.....	6	Longshoreman.....	2
Porter.....	6	Moulder.....	2
Clerk.....	6	Fireman.....	2
Contractor.....	6	Assistant Horse Trainer.....	1
Mechanic.....	6	Pressman.....	1
Cook.....	6	Actor-Boat Builder.....	1
Government or Civil Service.....	5	Dry Cleaner.....	1
Minister-Farmer.....	5	Gasoline Station Owner.....	1
Physician.....	5	Policeman.....	1
Truck Driver.....	5	Cable Splicer.....	1
Waiter.....	5	Material Handler.....	1
Military Service.....	5	Taxi Driver.....	1
Teacher-Principal.....	5	Owner of Racing Stable.....	1
Foreman.....	5	Crane Operator.....	1
Minister.....	4	Druggist.....	1
Brickmason.....	3	Electrician.....	1
Machinist.....	3	Landscape Gardener.....	1
Mail Carrier.....	3	Salesman.....	1
Government Worker.....	3	Tailor.....	1
Trucker.....	3	Not Stated.....	33
		Total.....	248

From one viewpoint the data of Table 23 provide an inspiring commentary on American democracy—that children from such modest homes can be in college, striving to develop their latent abilities to the highest level. More directly, however, the data suggest that the cost of sending their sons and daughters to college must be a tremendous financial strain

on parents of such low economic level. And these data must be interpreted in the light of the fact that the Morgan students are drawn from a higher economic level than the students of the other two state colleges for Negroes.

Elementary and Secondary Education

No attempt is made here to analyze all of the factors in the elementary and secondary education of Negroes which are of significance to the program of higher education. Presented in Table 24 are certain items relative to the status of public education in the state, by race.

TABLE 24

SOME ITEMS RELATIVE TO THE STATUS OF PUBLIC EDUCATION IN MARYLAND BY RACE

Item	Date	White	Negro
Enrollment in Last 4 Years High School, State.....	1944	54,573	8,524
*Enrollment in Last 4 Years High School, State.....	1934	49,781	5,536
*Enrollment in Last 4 Years High School, State.....	1923	26,353	1,778
High School Graduates, State.....	1944	8,740	1,093
High School Graduates, Counties Only.....	1944	6,550	718
Maryland Students Enrolled in Colleges of State.....	1945	.....	1,030
High Schools, State Approved.....	1944	150	34
High Schools Regionally Accredited.....	1944	40	1
Elementary School Teaching Positions, State.....	1944	4,987	1,416
High School Teaching Positions, State.....	1944	2,072	307
Average Salary of High School Teachers, State.....	1944	\$ 2,223	\$ 2,137
Average Salary of Elementary Teachers, State.....	1944	\$ 1,924	\$ 1,908
Average Salary of High School Teachers, Baltimore.....	1944	\$ 2,982	\$ 3,134
Average Salary of Elementary School Teachers, Baltimore	1944	\$ 2,173	\$ 2,236
*Average Salary of Teachers, State.....	1936	\$ 1,515	\$ 1,187
High School Per Capita Costs for Current Expenditures, State.....	1944	\$ 128	\$ 121
Elementary School Per Capita Costs for Current Expendi- tures, State.....	1944	\$ 74	\$ 67
*Elementary School Per Capita Costs for Current Expendi- tures, State.....	1936	\$ 68	\$ 48
Per Capita Value of School Property.....	1944	\$ 306	\$ 169
Capital Outlay.....	1944	\$411,271	\$15,465

* Comparative items for previous years.

The following generalizations concerning the subcollegiate education of Negroes may be stated:

1. The elementary and secondary schools for Negroes are in general inferior to those for whites. Perhaps the most arresting statistic revealing differences in the quality of sec-

ondary education, particularly, is that only one Negro high school in the entire state is accredited by the Middle States Association of Colleges and Secondary Schools. It is obvious that the Negro colleges of the state must recruit their students from inferior schools.

2. Negroes constitute a much smaller proportion of the high school graduates than of the total population. Although Negroes constitute 16.8 percent of the college-age population of the state, they contribute only 11 percent of the high school graduates. In view of the rapid increase in the Negro high school enrollment over the past twenty years, it may be anticipated that the proportion of Negro high school graduates will continue to increase.

3. In terms of financial support, the gap between the white and Negro schools has been greatly reduced in the past few years. In the state as a whole, the average salaries of teachers are substantially the same. In Baltimore City the average salaries of Negro teachers, on both the elementary and high school levels, are actually higher than those of white teachers. The racial differentials in costs and salaries are less in the public schools of the state than in the colleges. It is important to note that the average salary of high school teachers in Baltimore is higher than the average salary of Negro teachers in the state colleges.

II. THE PRESENT INSTITUTIONAL PATTERN OF HIGHER EDUCATION IN MARYLAND

Higher education is provided in the State of Maryland through a total of thirty-one institutions. These may be classified into five rather distinct types, according to their control and their dependence on support from public funds.

One group, consisting of eight institutions, is controlled by the state and receives financial support from legislative appropriations. These institutions are: the University of Maryland, Princess Anne College, Morgan State College, the four state teachers colleges, and St. Mary's Female Seminary.

Another group comprises three institutions which are controlled by local (city and county) boards of education and which receive support from local public funds and, in two of the three cases from state funds also. These three institutions are Coppin Teachers College, Montgomery County Junior College, and Hagerstown (Washington County) Junior College.

The third type is represented by a single institution, Washington College. It is controlled by a board of trustees, twelve of whom are appointed by the governor, twelve by the alumni, and these twenty-four elect the twenty-fifth, who is the president of the College. The control of this institution is thus only partially lodged in the state. This College receives support from state funds.

Four institutions, forming the fourth type, are not under public control but receive financial support from the state. These institutions are Johns Hopkins University, St. John's College, Western Maryland College, and the Maryland Institute for the Promotion of the Mechanic Arts and the School of Fine and Practical Arts.

The fifteen institutions of the fifth group have no element of public control and receive no financial support from governmental sources. Such institutions, however, do provide facilities for higher education and hence cannot be ignored in the total picture for the state as a whole. For that reason some information about these institutions has been gathered as a part of this survey. The state, having no direct voice in

the control of these institutions and not sharing in their support, naturally has relatively little concern with them individually. It is important, however, to note the place that these institutions as a group have in the provision of higher education for the young people of the state. This survey report, therefore, does not deal individually with each of the privately controlled and supported institutions, but rather considers them as a group in treating the extent and general nature of their services.

The eleven institutions over which there is direct public control in Maryland are of primary concern in this survey. The privately controlled institutions for which the state provides some financial support are also within the scope of this survey, particularly with reference to the services which the state receives in return for its grants. The following sections of this chapter are devoted to descriptions of the services rendered by each of the publicly supported institutions.

INSTITUTIONS WITH PUBLIC SUPPORT AND PUBLIC CONTROL

In the State of Maryland, eleven institutions are maintained under public control for educational services at the post-secondary level. Each of these institutions will be described in turn.

The University of Maryland

The University of Maryland is located at College Park, an unincorporated suburb of Washington, D.C. A branch is maintained in Baltimore and the Negro land-grant college at Princess Anne is also administered as a part of the University. The present University of Maryland is the result of a merger in 1920 of the old University of Maryland in Baltimore and the Maryland State College, located in College Park. The Maryland State College was a private institution chartered originally in 1856 as the Maryland Agricultural College. Following the Land Grant Act of 1862, it was designated as the land-grant college of the state and became partially a state institution. It was taken over entirely by the state in 1914. The old University of Maryland, which gave its name

to the new institution at the time of the merger, was itself a combination of some ten original institutions which, at various times since the founding of Baltimore College in 1804, had merged after starting out as independent units.

At the College Park branch the following instructional units of the University of Maryland are at present located:

- a) College of Agriculture
- b) College of Arts and Sciences
- c) College of Business and Public Administration
- d) College of Education
- e) College of Engineering
- f) College of Home Economics
- g) College of Military Science and Tactics, Physical Education and Recreation
- h) Graduate School
- i) Agricultural Experiment Station
- j) Agricultural and Home Economics Extension Service
- k) Summer Session

At the Baltimore branch the following instructional units are located:

- a) School of Dentistry
- b) School of Law
- c) School of Medicine
- d) School of Pharmacy
- e) University Hospital
- f) School of Nursing
- g) College of Education (Baltimore Division)
- h) Maryland State Board of Agriculture

At the Princess Anne College instruction is maintained in agriculture, mechanical arts, and home economics for Negro students.

The Agricultural and Home Economics Extension Service maintains local representatives in every county of the state. These representatives, county agents and home demonstration agents, provide expert assistance to farmers and farm families in their areas and, when necessary, call upon the large staff of specialists at the headquarters of the Extension Service at College Park.

The Live Stock Sanitary Service, which is charged with responsibility for the control and eradication of diseases of

live stock and poultry, maintains local veterinary inspectors throughout the state, in addition to specialists and laboratory technicians at the main laboratory at College Park and the branch laboratories in Salisbury, Centerville, and Baltimore.

Also located at College Park are the following units of the Agricultural Experiment Station or of the Extension Service: the Maryland State Department of Markets, the State Horticultural Department, the State Inspection and Regulatory Service, the Seed Inspection Service, the Dairy Inspection Service, and the State Department of Drainage.

The following affiliated agencies are located on the College Park campus but are not under the direction of the Board of Regents of the University of Maryland or the Maryland State Board of Agriculture:

Federal Agencies:

- Eastern Experiment Station, Bureau of Mines, U.S. Department of the Interior
- Fish and Wildlife Service, U.S. Department of the Interior
- Water Resources Branch, U.S. Geological Survey, U.S. Department of the Interior
- Agricultural Adjustment Administration, U.S. Department of Agriculture
- Maryland Crop Reporting Service, Bureau of Agricultural Economics, U.S. Department of Agriculture
- Maryland Headquarters of Agricultural Planning Field Service, Bureau of Agricultural Economics, U.S. Department of Agriculture
- Soil Conservation Service, U.S. Department of Agriculture
- Veterans Administration (Washington, D.C. Regional Office)

State Agency:

- Bureau of Control Surveys and Maps, Department of Public Works, State of Maryland

Private Agencies:

- National Sand and Gravel Association Research Foundation
- Aviation Division, American Society of Mechanical Engineers

The College of Arts and Sciences is divided into one lower division and four upper divisions. Under the latter are grouped the following departments:

- a) The Division of Biological Sciences: bacteriology, genetics, and zoology (the departments of botany and entomology are in the College of Agriculture)
- b) The Division of Humanities: art, classical languages and literatures, comparative literature, English literature and philology, foreign languages and literatures, music, philosophy, and speech
- c) The Division of Physical Sciences: astronomy, chemistry, geology, mathematics, and physics
- d) The Division of Social Sciences: history, psychology, and sociology (economics and political science are in the College of Business and Public Administration)

The work in the first and second years in the College of Arts and Sciences is taken in the lower division. It is designed to give the student a basic general education, and to prepare him for specialization in the junior and senior years. The upper divisions direct the courses of study of students doing their major work in the College of Arts and Sciences during their junior and senior years.

The University of Maryland is the state's land-grant college, with a branch at Princess Anne for Negro students. The usual federal funds are received for the purposes stipulated in the several federal acts.

The plant and equipment of the University represent an investment of more than \$14,000,000.

During the school year 1945-46, a total of 6,089 students were registered at the University of Maryland, with 4,176 at College Park and 1,915 on the Baltimore campus. Bachelor's degrees were granted in that year to 244 students, master's degrees to 38 students, doctor of philosophy degrees to 12 students, dental degrees to 134 students, law degrees to 20 students, medical degrees to 184 students, nursing degrees to 50 students, and pharmacy degrees to 15 students.

The University of Maryland is on the approved list of the Association of American Universities. It is accredited by

the Middle States Association of Colleges and Secondary Schools. Its professional schools of medicine, law, dentistry, business, and pharmacy are approved by the national accrediting agencies in those fields. Its curriculums in the following fields of engineering have been approved by the Engineers' Council for Professional Development: civil, chemical, electrical, and mechanical. An option of aeronautical engineering has been approved in mechanical engineering. Its work in preparing elementary and secondary school teachers is approved by the Maryland State Department of Education.

Morgan State College

Morgan State College is an institution for Negro youth, located in the City of Baltimore. It was chartered in 1867 as the Centenary Biblical Institute and began classes in Baltimore in 1869. In 1886 a branch school, Princess Anne Academy (now the Princess Anne College) was established to provide secondary and industrial education for the Negro population of eastern Maryland. The name of the school in Baltimore was changed to Morgan College in 1890 to honor a donor, Dr. Lyttleton F. Morgan, and at that time it began offering more courses of college level. In 1917 the College was moved to its present site at Hillen Road and Arlington Avenue. From the time of its founding until 1939, the College was under the control of the Methodist Episcopal Church and most of its funds were received from that source. Upon recommendation of the 1937 Commission on Higher Education of Negroes, Morgan College was purchased by the state for \$225,000 and officially became a state institution by act of the General Assembly, approved May 3, 1939.

During its history as a private institution, Morgan College maintained several contacts with the state. In 1891 the state designated Princess Anne Academy (then a branch of Morgan College) as the state land-grant college for Negroes, and although it received no state funds until 1914, Morgan College received the Morrill Act funds allocated by the federal government. Morgan College proper became a state-aided institution in 1919 at which time it received a state

grant of \$1,000. From that date until it was taken over by the state, the College regularly received state funds for current expenses and for scholarships.)

(At the time it was taken over by the state, Morgan College was an undergraduate liberal arts college and it had been the only college in the state training teachers for the Negro secondary schools. Since it has been a state institution, there has been no significant change in the curriculum or in its function. It devotes its primary efforts to training prospective teachers for the junior and senior high schools and preparing students for entrance to professional and graduate schools.) It also offers courses to women as homemakers and prepares students for employment in recreational and leisure-time activities through its departments of music, drama, and physical education. Through courses in commerce, training is given to students looking toward careers in business.

The College operates in three divisions:

- a) The College, which maintains regular liberal arts and teacher training courses covering a standard four-year curriculum, offered during the regular school year.
- b) The Summer School, through which for six weeks in the summer the College offers a variety of courses planned to serve primarily the needs of the Negro teachers of Baltimore and the counties.
- c) The afternoon and evening classes, in which (through cooperation with the Baltimore Department of Education) courses are given daily throughout the academic year at Douglass High School in Baltimore offering in-service training to teachers and an opportunity to others to avail themselves of college instruction.

The enrollment of Morgan College in 1939-40 was 395; in the autumn of 1946 the number of students was 1,067. There were 84 graduates in the spring of 1945, all with bachelors' degrees. There is no graduate work offered at Morgan State College.

The inventory value of land, buildings, and equipment is \$1,337,438. The campus contains eighty-five acres.

Morgan State College is accredited by the Middle States Association of Colleges and Secondary Schools. Its teacher training program is approved by the Maryland State Department of Education.

St. Mary's Female Seminary

St. Mary's Female Seminary is at St. Mary's City, a village with a population of sixty-five located in the southern part of the Western Shore of Maryland on the St. Mary's River. The village is 115 miles from Baltimore and 75 miles from Washington. The institution was originally established in 1839 as a memorial celebrating the two hundredth anniversary of the birth of the state. Its charter, signed in 1840, established it as an institution for the education of women. It was an academy until 1925, when the first two years of college work were added to the curriculum. Gradually the freshman and sophomore years of high school were dropped and today it is a four-year junior college, covering the work of grades eleven through fourteen. The institution for many years received some support from state funds; in 1941 the state took over the complete control.

The institution has transfer curriculums in liberal arts, home economics, and music. Terminal courses are offered in general culture, homemaking, and creative and applied art. Semiprofessional curriculums are offered in secretarial work, general business, and recreational leadership. The enrollment in 1945-46 was 94, which was fairly evenly divided among the four years with 16 seniors, 33 juniors, 25 sophomores, and 20 freshmen (the freshmen and sophomores are those in the third and fourth years of the high school).

The physical plant at St. Mary's represents an investment of \$383,823.

St. Mary's is accredited by the Maryland State Department of Education and by the University of Maryland. The junior college is not accredited by the Middle States Association of Colleges and Secondary Schools.

St. Mary's Female Seminary is a state junior college which draws its students from the whole of Maryland. Only 3 per-

cent of the students are from St. Mary's County, where it is located. Twenty-one percent come from other states, and 3 percent are from foreign countries.

Princess Anne College

Princess Anne College was established in 1886 under the name Princess Anne Academy, as a branch of Morgan College, then a Methodist Episcopal institution. During the early years of its existence, the institution offered only academic or industrial courses on the secondary school level. In 1891 the state designated Princess Anne Academy (then a branch of Morgan College) as the land-grant college for Negroes. Upon its designation as the land-grant college, according to the college catalogue, "The courses of study were modified and expanded to meet the provisions of the federal acts and a beginning made in systematic instruction of the Negro youth in agricultural and industrial subjects and in home economics." These courses, however, were on the secondary level.

When the state acquired control in 1919, the school offered only work from the eighth to the twelfth grades. In 1927, grades eight to ten were discontinued, and two years of college work were added. In 1929, all high school work was dropped, and the institution became a two-year junior college. With the purchase of the College by the state in 1935, the College became a degree-granting institution with four-year curriculums in agriculture, mechanic arts, and home economics. There has been no significant expansion of program since that time.

The relationship of the state to Princess Anne as a land-grant college is sufficiently significant to warrant special note. The history of this relationship is related in the *Report of the Commission on Higher Education of Negroes*,¹ as follows:

In 1892, the State found itself unable to participate in the distribution of Federal funds for education in agriculture and mechanic arts under the Morrill Act, without

¹ *Report of the Commission on the Higher Education of Negroes to the Governor and Legislature of Maryland, January 15, 1937.*

making some provision for Negroes. Work in this field was then begun under a contract between Morgan College and Maryland Agricultural College, the predecessor of the University of Maryland, whereby Morgan College undertook to do for the State at Princess Anne similar work on behalf of Negroes to that carried on by land-grant colleges in the South. As the result, the State was able to share in the annual distribution of the Federal funds and the monies to it were divided four-fifths to the Maryland Agricultural College for white students and one-fifth to Morgan College for colored students at Princess Anne.²

Although Princess Anne was designated by the Governor of Maryland as the Federal land-grant college for Negroes in 1891, and the Governor as *ex-officio* President of the Board of Trustees of the Maryland Agricultural College certified to the United States Secretary of the Interior the intention of the Board "to provide for this branch according to its needs," there is no evidence that such support was ever given by the Maryland Agricultural College, then and since the recipient of large State grants. The Princess Anne Academy applied for a small State grant in 1905, but was refused. In the same year the white land-grant college received a biennial grant of \$65,378.³

It was not until 1914 that the State made any grant to Princess Anne. In 1915 the Federal Government objected that the arrangement did not comply with the Morrill Act because the scholastic level of Princess Anne Academy was too low, and also because the institution being under the control of Morgan College, could not be regarded as an instrumentality of the State entitled to share in the fund. Finally, in order to satisfy the demands of the Federal Government, a contract was executed by the University of Maryland and Morgan College in 1919 by which the administrative control of Princess Anne was transferred to the University of Maryland. The property was not transferred or paid for by the State, but it was understood between the University of Maryland and Morgan College that if at any time the arrangement should be found unsatisfactory to either party, the State would purchase the property at a price to be agreed upon or fixed by arbitration. In 1928, further objections

² *Ibid.*, p. 11.

³ *Ibid.*, p. 136.

were raised by the Federal officials, and shortly thereafter, Morgan College asked for payment under the contract, but without success; and continued to renew its demands in this respect until the passage of the Act of 1935, ch. 548, above referred to, by which the State appropriated \$100,000 to be paid to the college in annual installments of \$25,000.⁴

It is apparent that, throughout the period referred to, the state did not give adequate support to Princess Anne as a land-grant college.

The physical plant at Princess Anne is carried at a value of approximately \$500,000.

Princess Anne College holds no accreditation above the level of state approval. Although it is officially a branch of the University of Maryland, which is accredited by the Middle States Association of Colleges and Secondary Schools and on the approved list of the Association of American Universities, the University's accreditation status does not extend to Princess Anne College.

Bowie State Teachers College

Bowie State Teachers College is a teacher education institution that specializes in the preparation of Negroes for positions in the elementary schools. It is located near Bowie, a village of 767 population situated between Washington and Baltimore. It is under the direct supervision of the State Board of Education and the State Department of Education.

This institution is an outgrowth of the old Baltimore Normal School which was established under private auspices, about 1867, for the training of Negro teachers in that city. In 1908 the school was taken over by the state and established in its present location as the Maryland State Normal and Industrial School. Prior to that time there was no institution supported by state funds for the training of Negro teachers.

During the early years of its existence as a state institution, the school operated altogether on the elementary and high school levels. In 1925, a two-year normal course was organized, and in 1928, all high school work was discontinued.

⁴ *Ibid.*, pp. 11-12.

The first three-year class was graduated in 1935, and with the class entering in 1938 the institution became a four-year teachers college granting the B.S. degree in education.

Bowie State Teachers College is accredited by the Maryland State Department of Education, but not by the American Association of Teachers Colleges or by the Middle States Association of Colleges and Secondary Schools.

The value of the physical plant at Bowie is reported to be \$556,164.

The enrollment in 1945-46 was 132 students, all of whom were from the State of Maryland. In 1939-40 the enrollment was 131.

Frostburg State Teachers College

Frostburg State Teachers College is located at Frostburg, a city of 7,659 population, in the western part of Maryland. It is eleven miles from Cumberland, the second largest city in the state. The institution was created in 1902 by the General Assembly.

The program of studies at Frostburg is maintained primarily for the preparation of white elementary school teachers, although a junior college program in general education was begun in 1935.

The enrollment in 1939-40 was 223. As in the case of other institutions, the enrollment dropped during the war period, but in the autumn of 1946 there were 227 students enrolled.

The value of the physical plant at Frostburg is carried at \$484,268.

Frostburg is accredited by the State Department of Education, but not by the American Association of Teachers Colleges or by the Middle States Association of Colleges and Secondary Schools.

Salisbury State Teachers College

Salisbury State Teachers College is located at Salisbury, a city of 13,313 population on the Eastern Shore of Maryland. It is the youngest of the teachers colleges established in the state, having been authorized in 1922 by the General As-

sembly. By act of the legislature its enrollment is limited to 280 students. The enrollment in 1939-40 was 175 and in the autumn of 1946 there were 246 enrolled. In addition to the regular elementary-teacher training program, Salisbury has had since 1935 a junior college program in general education for transfer purposes.

The physical plant at Salisbury is carried at a value of \$821,448.

Salisbury is accredited by the State Department of Education and the American Association of Teachers Colleges; it is not accredited by the Middle States Association of Colleges and Secondary Schools.

Towson State Teachers College

Towson State Teachers College, located in a suburb of the City of Baltimore, is the oldest teachers college in the state. It was created by the legislature in 1865 and began instruction in 1866. It was located in the City of Baltimore until 1915 when it was moved to its present site. Its name was changed in 1934 from the Maryland State Normal School to the Maryland State Teachers College, at which time a four-year course of instruction was offered, leading to the B.S. degree in education. A junior college transfer curriculum in general education was begun in the autumn of 1946.

The enrollment in 1939-40 was 571. The number of students dropped considerably during the war period and was 267 in 1945-46.

The plant and equipment at Towson is valued at \$1,-656,658.

Towson is accredited by the State Department of Education and the American Association of Teachers Colleges, but not by the Middle States Association of Colleges and Secondary Schools.

Coppin Teachers College

Coppin Teachers College is an institution for Negroes located in the City of Baltimore. Its purpose is to prepare elementary teachers for the Negro elementary schools in the City.

Coppin Teachers College had its beginning in 1900 with the formation by the Baltimore City School Board of a training class at the Colored High School for the preparation of Negro elementary teachers. Two years later this class was made the "normal department" and the school became a "high and training school" with a two-year curriculum for the preparation of teachers. In 1909, the training department was detached from the high school and became a separate institution with its own principal. It was later called the Fannie Jackson Coppin Normal School in honor of Fannie Coppin, a former slave who became the first Negro woman to receive a college degree in the United States and who later introduced teacher training in her work in Philadelphia. In 1931, the curriculum was extended to four years and the school became Coppin Teachers College with authority to grant the degree of B.S. in education.

The Coppin Teachers College is a part of the public school system of Baltimore City and is not under state control. For a number of years Baltimore had two city normal schools, one for the training of white teachers and one for the training of Negro teachers. The normal school for white students has been discontinued and its work transferred to the Towson State Teachers College, which is located on the edge of the city. Thus Coppin Teachers College is at present the only teachers college supported by Baltimore City.

The enrollment at Coppin was 148 in 1939-40, 184 in 1941-42, and then dropped to 122 in 1945-46. There were 129 students enrolled in the autumn term of 1946.

Coppin Teachers College is accredited by the State Department of Education, but not by the American Association of Teachers Colleges or by the Middle States Association of Colleges and Secondary Schools.

Montgomery Junior College

Montgomery Junior College is located at Bethesda, Maryland, which is a suburb of Washington, D.C. It was opened for instruction in the autumn of 1946 and enrolled 186 students, but could accommodate 400 students in the present

academic facilities of the institution. It is under the control of the Montgomery County Board of Education. The state has made a grant of funds for the operation of the institution, but the principal support is from student fees.

The curriculums set up for transfer purposes include liberal arts and science, pre-commerce and business administration, pre-engineering, prelegal, premedical, predental, and prenursing. The terminal curriculums include art, automotive-service management, drafting, general business administration, medical secretarial, merchandising, and secretarial.

The Montgomery Junior College is accredited by the Maryland State Department of Education. It has no other accreditation because of its recent establishment.

Hagerstown Junior College

Hagerstown Junior College is located at Hagerstown, the third largest city in the state, with a population of 32,491. Hagerstown is 75 miles northwest of Baltimore. This junior college was also opened in the autumn of 1946, and approximately 90 students were enrolled, most of them in a liberal arts transfer curriculum.

The Hagerstown Junior College is under the control of the Washington County Board of Education. The state has made a grant of funds to assist in its operation, but the principal source of support is tuition fees.

The Hagerstown Junior College is accredited by the Maryland State Department of Education but carries no other recognition because of its newness.

INSTITUTIONS RECEIVING SUPPORT FROM STATE FUNDS BUT NOT UNDER PUBLIC CONTROL

Washington College

Washington College is located on the Eastern Shore at Chestertown. It is about ninety miles from Baltimore around the head of the Chesapeake Bay and about forty miles by ferry across the bay. It is approximately twenty miles from the Delaware state line. Chestertown has a population of 2,760.

The curriculum at Washington College is limited to liberal arts. Secondary school teachers are prepared at the institution and a variety of preprofessional courses are offered. The College is accredited by the Maryland State Department of Education and the Middle States Association of Colleges and Secondary Schools.

Washington College first received money from the State of Maryland in 1784 and it has since been receiving funds at various times in varying amounts. In return for a number of scholarships Washington College receives \$60,000 annually from the State of Maryland at the present time.

The physical plant and equipment at Washington College are valued at \$754,139.

The Johns Hopkins University

The Johns Hopkins University is located in the City of Baltimore. The main campus, known as Homewood is in the northern part of the city; this unit comprises the College of Arts and Sciences, the School of Engineering, the School of Business, and the School of Higher Studies. The School of Medicine and the School of Hygiene and Public Health are located in the eastern section of Baltimore.

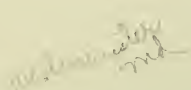
In 1898, the President of the Board of Trade suggested that the legislature be asked to grant a donation to the University. On March 3, 1898, the University's case was placed before the Committee on Ways and Means in Annapolis. In return for twenty-six scholarships, one from each senatorial district, the University received an annual state grant of \$100,000. A resolution recommending that the charter be amended to make the governor of the state and the chief justice of the state Supreme Court ex-officio members of the Board of Trustees was rejected by the House of Delegates. Later the same legislature agreed to donate, without any conditions, \$50,000 to the University for two years, but considered such an appropriation an emergency grant to help the institution through its financial crisis until such time as it could continue on its own revenues without further state aid.

When the two years of state aid brought little change in the financial condition of the University, the trustees pre-

sented a memorial to the legislature requesting the continuation of the state appropriation. After a discussion in the legislature of the University's financial needs, an appropriation of \$24,000 for the University was finally included in the legislature's "Omnibus Bill" of 1900. Though the legislature at that time disapproved of the founding of scholarships for fear that the state would thereby establish a permanent policy of supporting the University, it continued to grant state aid. In 1902 the legislature increased the University's state aid to \$25,000, which continued until 1916 when that sum was increased to \$65,000.

In 1912 the State of Maryland appropriated \$600,000 to the University for the purpose of starting a School of Engineering and contributed \$50,000 a year to the support of this school, in return for scholarships. The state was already contributing \$25,000 for the general support of the University. Chapter 90 of the Acts of 1912 provides that Johns Hopkins University shall grant a total of 129 scholarships in consideration of the appropriation made by the state. At the time of the passage of the act of 1912, this provided one scholarship for each member of the House of Delegates, six scholarships from the state at large without reference to county or legislative district, and three scholarships from each of the following institutions:

Loyola College
Maryland Agricultural College (now the University of Maryland)
Mt. St. Mary's College
Rock Hill College
St. John's College
Washington College
Western Maryland College



The addition of districts five and six to the City of Baltimore increased the total number of scholarships to 141, the number today. The 120 scholarships awarded to the several counties and the legislative districts of the City of Baltimore are awarded to deserving young men graduates of approved high schools who lack means of securing a technical education. Where there is more than one applicant for any scholar-

ship, there must be a competitive examination and the senator from the particular county or legislative district of Baltimore City must certify as to his financial need and worthiness. The scholarships from the colleges are to be awarded on scholastic standing as certified by the president or other executive officer of each college. These scholarships are limited to the School of Engineering and include free tuition and exemption from all laboratory, library, and graduation fees, as well as purchase of books. One of the scholarships from each county and each legislative district of Baltimore City, except the fifth and sixth (which were created after the passage of the act), is to be known as a "Senatorial Scholarship" and carries with it the payment of \$200 per year, in addition to tuition and books.

The School of Engineering, built by the State of Maryland for The Johns Hopkins University in 1912, was originally designed for 300 students. The enrollment had increased to 450 in the last year before the war, and in the autumn of 1946 approximately 800 students were enrolled. In order to meet the demands for additional accommodations, The Johns Hopkins University is requesting the state to add two buildings to the School of Engineering at Homewood, one to cost \$750,000 and the other \$500,000 (estimates of cost were made approximately two years ago, and these figures would undoubtedly be higher today). One of these buildings would be for chemical engineering, and the other would be a research building.

The total value of the plant at Johns Hopkins University is \$14,563,432.

The Johns Hopkins University is a member of the Association of American Universities, the highest possible accreditation for any American institution. The Johns Hopkins University is the only institution in the State of Maryland that enjoys this distinction. The Engineers Council for Professional Development has accredited engineering curriculums at Johns Hopkins University in the fields of civil, chemical, electrical, and mechanical engineering.

St. John's College

St. John's College is located at Annapolis, a city of 13,069 population, twenty-four miles from Baltimore and thirty-three miles from Washington, D.C. The program of studies at St. John's College is now based upon the study of the "great books"; only one degree, the Bachelor of Arts, is granted, after completion of 140 semester hours of work, all of which is prescribed for all students.

St. John's is one of the oldest institutions in the State of Maryland, having been granted a charter by the General Assembly of the State of Maryland in 1784. It is nonsectarian and receives male students only. In the original charter provision was made for a state appropriation "for the further encouragement and establishment of a college on the Western Shore of Maryland." The College has from time to time since been the recipient of appropriations from the state in varying amounts and for various purposes. In return for the present \$63,000 state appropriation St. John's College gives qualified Maryland residents twenty-nine scholarships for tuition and twenty-nine for tuition, board, and room rent.

The plant and equipment of St. John's College are valued at \$1,050,119. There is an outstanding indebtedness of \$209,000.

St. John's is accredited by the Maryland State Department of Education, but not by the Middle States Association of Colleges and Secondary Schools.

Western Maryland College

Western Maryland College is located at Westminster, a city of 4,692, approximately thirty-five miles northwest of the City of Baltimore. It was chartered in 1866 under the auspices of the former Methodist Protestant Church and is now one of the church-related colleges of the Methodist Church.

Western Maryland College is a liberal arts institution which prepares teachers for secondary school teaching. A Master of Education degree has also been offered in the past. It is accredited by the Maryland State Department of Educa-

tion, the Middle States Association of Colleges and Secondary Schools, and the University Senate of the Methodist Church.

Beginning in 1878 with an appropriation of \$2,500 from the state, Western Maryland has been receiving increasing amounts until today it gets \$58,500 in return for fifty-eight scholarships covering tuition and board and twenty-eight scholarships covering tuition for students from Carroll County.

The value of the physical plant and equipment is carried at \$1,767,577.

Maryland Institute

The Maryland Institute for the Promotion of the Mechanic Arts and the School of Fine and Practical Arts is located in the City of Baltimore. One building, devoted to the mechanic arts, is called the Market Place School; another building, devoted to the fine arts, is located on Mount Royal Avenue. The value of the plant is reported to be slightly more than \$500,000.

In 1878 an annual state appropriation of \$3,000 was allowed the Maryland Institute. The annual grants have been gradually increased so that in 1945-46 the amount was \$16,500. The Institute also receives an annual appropriation of \$26,000 from the City of Baltimore. In return for the state grant each county in the state and each legislative district in the City of Baltimore is awarded one free scholarship at the Maryland Institute, recipients being selected by the school commissioners of the counties and Baltimore City.

At the Market Place School four-year night-school courses are given in mechanical, architectural, sheet metal, marine, structural, and aeronautical drawing. At the Mount Royal School evening courses are conducted in fine arts, modeling, water color, general design, crafts, lettering, advertising design, commercial design, costume design, wood crafts, interior decoration, and commercial illustration. Saturday classes are conducted for children in a number of crafts and arts. A four-year curriculum in art education leading to the degree of Bachelor of Fine Arts is provided for students; however,

the academic courses have to be secured from an accredited institution other than the Maryland Institute.

Inasmuch as Maryland Institute receives only a small state appropriation and conducts very little of its program at the college level, it has not been included in this survey as a state-supported institution.

SUMMARY FOR STATE-SUPPORTED INSTITUTIONS FOR WHITE STUDENTS

Two of the state-supported institutions for white students in Maryland are located on the Eastern Shore—Washington College and Salisbury State Teachers College. One institution is located in the extreme western part of the state—Frostburg State Teachers College. The St. Mary's Female Seminary is in the extreme southern part of the state. The remainder of the institutions are located in the central part of the state where the majority of the white population is concentrated.

The University of Maryland would doubtless have served the state somewhat better if it had been located closer to Baltimore. The investment in plant at College Park now makes it impossible to consider any relocation of the University as a whole. Wisely, certain of the professional schools of the University have been set up in Baltimore, and a program of extension classes is maintained to serve the Baltimore area. Despite the approximately thirty miles distance between Baltimore and College Park, large numbers of residents of Baltimore do attend the University of Maryland. In respect to the location of its state university, Maryland is not different from a great many other states that have set up their universities at a considerable distance from the main concentration of urban population.

Examination of the programs of the state-supported institutions in Maryland shows remarkably little duplication or overlapping. There are three colleges that prepare teachers for the white elementary schools, but each of these, as was shown in chapter i, serves a practically unique constituency. Two engineering colleges are maintained, one under

public control at the University of Maryland and the other under private control but with state support at Johns Hopkins University. The combined efforts of these two schools of engineering are inadequate at present to meet the demands of students for engineering education. There are no other instances of duplication in the professional schools programs carried on under state support or in upper division programs in the liberal arts. Duplication at the junior college level in liberal arts cannot be objected to, especially when classes in most of the subjects are filled. Those who have guided the destinies of higher education in Maryland should be congratulated on having avoided any extensive duplication of services, a type of waste that is relatively common in other states.

Extension services have not been widely developed in the State of Maryland, except under the auspices of the University of Maryland. The Frostburg State Teachers College has a small program of extension classes, which serves chiefly teachers and nurses in the immediate area of the College. Except for the extension work in agriculture and homemaking carried on by the University of Maryland with the help of federal grants, the program of extension services from that institution is limited largely to the Baltimore area. The survey staff has not attempted any detailed study of the extension services provided for the people of Maryland through their state institutions. Such observations as have been made would lead to the conclusion that this area of service is relatively undeveloped, except for the federally supported programs in agriculture and homemaking.

Table 25 summarizes certain facts regarding the state-supported institutions for white students in Maryland.

Of all the institutions that are both state supported and state controlled, only the University of Maryland has developed a large enrollment. The number of students at Towson State Teachers College gives promise of reaching a reasonable size when conditions are more attractive to the enlistment of young people in the teaching profession. The State Teachers Colleges at Frostburg and Salisbury are both

too small for economical operation as separate units. Both of these institutions have a heavy proportion of junior college students, and are actually serving only small numbers of students who intend to enter the teaching profession. St. Mary's Female Seminary is entirely too small to permit economical operation.

An important indication of the quality of the programs maintained is found in the accredited status of the institu-

TABLE 25

THE STATE-SUPPORTED INSTITUTIONS FOR WHITE STUDENTS IN MARYLAND

NAME OF INSTITUTION	SEX OF STUDENTS	ACCREDITATION*	ENROLLMENTS AUTUMN 1946	COSTS TO STUDENTS	
				Tuition and Fees for Year	Board and Room for Year
University of Maryland.....	Coed	A. A. U.	8,427	\$145.00	\$425.00
St. Mary's Female Seminary...	Women	State Only	89	120.00	350.00
Towson State Teachers College.	Coed	A. A. T. C.	458	None	216.00
Salisbury State Teachers College.....	Coed	A. A. T. C.	242	None	216.00
Frostburg State Teachers College.....	Coed	State Only	235	None	216.00
Washington College.....	Coed	M. S. A.	475	190.00	370.00
Johns Hopkins University.....	Coed	Member A. A. U.	1,944	500.00	535.00
St. John's College.....	Men	None	240	600.00	400.00
Western Maryland College.....	Coed	M. S. A.	786	300.00	425.00

* Symbols for accreditation are as follows: *A. A. U.*—on approved list of Association of American Universities; *A. A. T. C.*—member of American Association of Teachers Colleges; *M. S. A.*—member of Middle States Association of Colleges and Secondary Schools.

tions. Johns Hopkins University holds the highest possible accreditation, as a member of the Association of American Universities. The University of Maryland also enjoys the distinction of the highest possible level of accreditation for its undergraduate and professional school programs; it is on the approved list of the Association of American Universities, but has not yet achieved membership in that organization, a distinction reserved for universities with strong programs of advanced graduate study. The other institutions rate far below these two with respect to their recognition by accrediting agencies. Two of the State Teachers Colleges, Towson and Salisbury, hold accreditation by the American

Association of Teachers Colleges, but are not regionally accredited by the Middle States Association of Colleges and Secondary Schools. The other State Teachers College, Frostburg, holds no accreditation except that granted by the state. St. Mary's Female Seminary is also without regional accreditation for its junior college program. Both Washington College and Western Maryland College hold regional accreditation by the Middle States Association, but are not on the approved list of the Association of American Universities. St. John's College holds no accreditation.

The significance of accreditation lies in the fact that the stamp of approval by an accrediting agency indicates recognition within the academic world outside the State of Maryland. Students who attend unaccredited institutions are likely to find universities in other states somewhat reluctant to accept their credits at full value on transfer. Licensing for the various professions is often denied in other states to those who have not had their preliminary preparation in accredited institutions. The veterans attending under the GI Bill of Rights have been particularly shrewd in choosing for the most part to attend accredited institutions if at all possible. It would seem that one of the first requisites for a satisfactory program of higher education in Maryland would be the maintenance of all institutions that are continued with state support at a level that will warrant their accreditation by regional and national agencies. Institutions that the state is unwilling to support at the accredited level ought to be discontinued.

The cost to the students varies greatly in the different institutions that receive support from state funds. The state teachers colleges have no tuition fees whatever, and they provide board and room at an unbelievably low figure. Substantial tuition fees are charged at the University of Maryland and at St. Mary's Female Seminary. Board and room charges at the latter institution are certainly below the amount that would support reasonably adequate provision in these times. Washington College is more like a state-controlled than a privately controlled institution in charging a relatively low

rate of tuition fees to Maryland residents; a higher rate is charged out-of-state students. In the other three privately controlled institutions, the tuition fees range from \$300 to \$600 a year, and the total for board, room and tuition ranges from \$725 to \$1,035.

The size of the tuition fees and the board and room charges at all the state-supported institutions in Maryland indicate that, with the exception of the teachers colleges, considerable selection of students must occur on the basis of economic status. In other words, with the present levels of tuition fees in the institutions, attendance anywhere in Maryland except at the state teachers colleges is likely to be limited to young people whose families already have considerable economic resources, or who have subsidies from other sources such as the federal government. One of the important problems facing the educational leaders and the legislature of the state is some method of democratizing opportunities for obtaining higher education, so that these opportunities may not be limited to the more highly privileged economic groups. Good mental ability is to be found in the population at all economic levels, and it is a serious waste of this most precious resource for the state to fail to set up conditions so that youth of superior ability may have higher education regardless of their financial status.

THE OUT-OF-STATE SCHOLARSHIP PROGRAM FOR NEGRO STUDENTS⁵

The descriptions that have been given of the publicly controlled institutions for Negroes in Maryland lead to the following conclusions:

1. The state has only recently assumed its obligation to provide higher education facilities for the Negro population. Its first appropriation for work at the college level was a grant of \$1,000 made to Morgan College, then a private institution, in 1919. Work of college level was inaugurated at Prin-

⁵ This section was prepared by the specialist on Negro education, Dr. Martin D. Jenkins, of Howard University.

cess Anne in 1927 and at Bowie in 1925. Morgan College was taken over by the state in 1939. Thus none of the colleges is deeply rooted as a state institution.

2. The colleges for Negroes, with the exception of Bowie, are in their present locations as a matter of chance rather than as a result of state planning. Princess Anne became the state land-grant college for Negroes because of a series of circumstances entirely unrelated to the needs of the Negro population. Morgan became a state liberal arts college because it happened to be the only college capable of immediate development when the state was under pressure to establish college facilities for the Negro population.

3. The state has consistently pursued a policy of providing higher education facilities for Negroes which are inferior to those provided for whites. The meager appropriations and the inferior accreditation status of the Negro colleges attest to this fact.

4. The state has not taken seriously its responsibilities for the development of a land-grant college program for the Negro population. The history of the relationship of the state to Princess Anne College, the nominal land-grant college for Negroes, reveals that the state has consistently and at every point possible neglected its legal and moral obligation to provide adequate agricultural and mechanic arts education for the Negro population.

5. The administrative arrangement whereby Princess Anne College became a branch of the University of Maryland came about entirely as an expedient solution to the problem of providing a state-owned land-grant college for Negroes.

6. Facilities for the graduate and professional education of Negroes are not available within the state in either public or private institutions (with the single exception of the law curriculum at the University of Maryland).⁶ Further, a number of undergraduate curriculums which are offered for white students at the University of Maryland are not offered in any of the institutions of higher education for Negroes.

⁶ It is reported also that The Johns Hopkins University is willing to accept qualified Negro students who are candidates for the Ph.D. degree.

This long-standing condition has constituted a drastic limitation upon the educational opportunities of the Negro citizens of the state.

Historical Background of the Out-of-State Scholarship Program

In an attempt to alleviate somewhat the condition of limited opportunities for Negro students, a legislative act in 1933 provided that the Board of Regents of the University of Maryland might allocate some of the state appropriations for Princess Anne Academy to establish partial scholarships at Morgan College (which was not at that time a state institution) or at out-of-state institutions. These scholarships were to be awarded "worthy Negro students," to take "professional courses or such other work as is not offered in the said Princess Anne Academy but which is offered for white students in the University of Maryland"

It was not until 1935, however, that funds were actually made available for scholarship aid. At this time a Commission on Higher Education for Negroes was appointed. This Commission awarded scholarships totaling \$1,175 to eight Negro graduate students in 1936-37. In 1937 a new Commission on Scholarships for Negroes was appointed, and the sum of \$30,000 for each of the fiscal years 1937 and 1938 was appropriated for scholarships for Negro students and the administrative expenses of the Commission. When Morgan College became a state institution in 1939, the administration of the state scholarships was transferred from the Commission to the Board of Trustees of Morgan State College. The fund is now administered by the Trustee Committee on State Scholarships.

Regulations Governing the Award of Scholarships

Applicants are declared eligible when they desire and are qualified to study in fields available at the University of Maryland, but not available at Morgan State College or Princess Anne College. Applicants must be bona fide resi-

dents and citizens of Maryland. Each applicant is required to submit to the committee a formal application, three letters of recommendation, a physician's certificate of health, and an official copy of his academic record; each new applicant must appear before the committee for a personal interview.

The application must be submitted during the period June 1 to August 1. Any applications received after August 1 are held over until the next school year. On the basis of the information obtained about the applicant and after he has been accepted by the institution of his choice, the committee decides upon the amount of the award. The amount of each award is based upon the difference between the cost at the University of Maryland and the institution of the applicant's choice. Taken into consideration are tuition charges, living expenses, and costs of transportation. As a general rule the student is allowed the difference between the tuition charges at the University of Maryland and the institution of his choice, plus the estimated difference in living costs, plus transportation costs each semester. Part-time students are awarded the differential in tuition only.

Appropriations and Scholarships Awarded

Altogether, during the ten-year period 1937-47, the state has appropriated \$295,000 for state scholarships for Negroes. This sum, less the amount awarded to undergraduates, represents substantially the total amount the state has expended during its history for the graduate and professional education of the Negro population. Shown in Table 26 are the total appropriations and expenditures, by years, during the period the state scholarship fund has been administered by the Trustee Committee.

It is to be observed that in every year except 1944-45 the appropriation has been sufficient to cover the awards granted. Although no actual deficit was incurred in this year, each scholarship was drastically reduced so that the total sum of the awards did not exceed the appropriation. A further significant fact to be observed is the steady increase in the amount of scholarship aid awarded for summer study.

The average award is a very modest one, amounting to an average of \$207 in 1945, \$135 in 1944, and \$230 in 1943. When these sums are compared with per capita costs at the University of Maryland, it is seen that the state is getting a

TABLE 26
STATE SCHOLARSHIP FUND FOR NEGROES
Total Appropriations, Expenditures, and Balance, 1939-46

YEAR	APPROPRIATION	EXPENDITURES		TOTAL	BALANCE	DEFICIT
		Academic Years	Summer			
1939-40....	\$25,000	\$24,316.00	.....	\$24,316.00	\$684.00	.....
1940-41....	25,000	24,916.00	.....	24,916.00	84.00	.....
1941-42....	25,000	24,755.25	.....	24,755.25	244.75	.....
1942-43....	25,000	22,196.00	\$2,778.00	24,974.00	26.00	.....
1943-44....	30,000	23,477.40	6,522.00	29,999.40	.60	.....
1944-45....	25,000	17,800.00	7,170.00	24,970.00	30.00	\$7,513.60*
1945-46....	40,000	27,993.00	11,739.00	39,732.00	268.00	.....
Total..	\$195,000	\$165,453.65	\$28,209.00	\$193,662.65	\$1,337.35	\$7,513.60

* Although no actual deficit was incurred, the awards due students were curtailed by this amount to remain within the funds appropriated.

bargain indeed in the graduate and professional education of Negro students.

Shown in Table 27 are the fields of study in which awards have been made during the period 1939-46.

The undergraduate curriculum constitutes from a third to a fourth of the total spread of fields represented. The consistent demand for commerce and fine arts on the undergraduate level justifies the offering of these curriculums at Morgan State College so that students could secure their training within the state. In view of the difference in the availability of curriculums at the University of Maryland and the Negro colleges, the small number of undergraduate awards is surprising. This condition points up one of the inherent evils of an out-of-state scholarship program. The high school student who contemplates attending college is likely to exclude from consideration those fields not offered at nearby institutions, with the result that he may not enter the field for which he is best fitted and in which he may make

TABLE 27

FIELDS OF STUDY IN WHICH AWARDS HAVE BEEN MADE FROM STATE SCHOLARSHIP FUND FOR NEGROES, 1939-46

FIELDS OF STUDY	1939-40		1940-41		1941-42	1942-43			1943-44			1944-45			1945-46			TOTAL FOR 7 YEARS
						Reg.	Sum.	Total	Reg.	Sum.	Total	Reg.	Sum.	Total	Reg.	Sum.	Total	
Undergraduate:																		
Agriculture.....	5	4	2			1		1							1			11
Architecture.....	1	1				27	2	29							18			5
Commerce.....	23	21	23			18		18	13		13				15			142
Engineering.....	2	3	12			16		16	13	2	15				4			65
Fine Arts.....	24	19	21			16		16	6		6				7			106
Journalism.....	2					2		2	2		2				2			9
Industrial Education.....	3	3				3		3	3		3				2			14
Orchestration.....		1	1															2
Graduate:																		
Agriculture.....		2	3			1		1							1			7
Biology.....	4	2							2	1	3				2			13
Business.....	1		4			2		2	2		2				3	2		16
Chemistry.....	1	2	2												1			8
Economics.....									1		1				1			3
Education.....	33	30	37			23	6	29	25	27	52	42	80	122	39	69	108	411
Engineering.....																		1
English.....	7	6	4			1		1			2	2	1	3	2	2	4	27
Fine Arts.....	3	2	3			4	1	5	1	3	4	1	5	6	2	6	8	31
History.....	1	2	1			1		1			1	1		1	1			8
Home Economics.....	1	1					1	1	2	1	3	2	4	6	1	2	3	15
Library Science.....									1	2	3	3	2	5	3	2	5	15
Mathematics.....	2	2	2			1		1	1	1	2	2	1	3	2		2	14
Modern Language.....	1	2	1			1		1							1		1	6
Philosophy.....															1		1	1
Physical Education.....													3	3		3	3	6
Physics.....	1	1	1			1		1					1	1	1		1	6
Social Science.....	7	17	16			18		18	4	7	11	20	5	25	18	4	22	116
Professional:																		
Dentistry.....	3	3	5			6	4	10	2	2	4	6	4	10	4		4	39
Law.....		2																2
Medical Technician.....	2					1	1	2	4		4	1						9
Medicine.....	8	11				8	9	17	6	4	10	5	5	10	8	3	11	73
Nursing.....	7	4	2			19	3	22	14		14	4	1	5	6	3	9	63
Pharmacy.....		2	1			3		3	1		1	2	2	4	3	3	6	17
Public Health.....						2		2			1	1		1				4
Total.....	142	145	148			159	27	186	102	53	155	132	122	254	135	100	235	1,265

his best contribution. Thus both the individual and society are the losers.

The tabulation for graduate and professional fields gives a very clear picture of the state's provision for the education of Negroes at this level and the extent to which Negro citizens of Maryland are securing advanced training. It is seen that during the regular year education and social science (largely social work) attract, by far, the largest number of students. One of the most striking facts revealed is the very small number of students pursuing advanced work in fields other than the two mentioned. Certainly, there is an insufficient number of students in any of these other fields to sustain separate graduate curriculums in a Negro institution.

A noteworthy trend is the increasing number of summer-session students aided. Most of these students are public school teachers who are advancing the level of their training, and a majority of them are in the field of education. It is probable that the number of summer-school scholarship awards will soon exceed that of the regular session.

Basic Problems

The fundamental problem of the out-of-state scholarship program is the adequacy of the program itself. Both the State Supreme Court and the Supreme Court of the United States have held that the provision for scholarships to enable Negroes to attend colleges outside the state does not meet the constitutional test of "equal protection of the laws." As pointed out in the National Survey of the Higher Education of Negroes, "In view of the Supreme Court decision referred to above, the out-of-state scholarship program cannot be regarded as a permanent solution of the problem of providing equality of educational opportunity for Negroes in those States which require separate facilities for white persons and for Negroes."⁷ The decision must be made, then, as to whether the state is to continue, without modification, a program which is clearly unconstitutional.

⁷ *General Studies of Colleges for Negroes*, the National Survey of the Higher Education of Negroes (Washington: Government Printing Office, 1942), II, 20.

A second basic problem is the question of the adequacy of the present appropriations to meet future needs. It is certain that, within the next few years, there will be a tremendous demand for scholarship aid. At the undergraduate level, for example, any male Negro student can qualify for aid in any curriculum if he desires to attend an institution which affords R.O.T.C. training (an opportunity not now available in any of the Negro colleges in the state). At the graduate level, a large increase in demand, particularly from public school teachers, may be anticipated. The Trustee Committee on State Scholarships has "conservatively estimated that one-fourth of the public school teachers (500 of the 2,000 Negro teachers in the state) will attend summer school each year after the present emergency moratorium on certificate renewal is lifted."⁸

In addition to the matter of future demand is the question of the adequacy of the individual grants. In many cases, at least, the amount of the state scholarship is insufficient to compensate the student for leaving the state and to meet the actual differential in costs.

The final basic problem to be mentioned here is that of provision for administration of the fund. The present appropriations include no provision for administrative personnel. As a result all of the detailed work of the Trustee Committee on State Scholarships is imposed on the registrar of Morgan State College, who is the official secretary to the committee. This arrangement places an excessive burden on the registrar and does not permit the fund to be administered with optimum effectiveness. If the scholarship plan is continued, a fund might well be appropriated to provide suitable administrative personnel.

INSTITUTIONS THAT DO NOT RECEIVE SUPPORT FROM PUBLIC FUNDS

There are a total of fifteen institutions of higher education in Maryland that do not receive financial support from public funds and that are not under public control. Eight of these

⁸ Minutes of the Committee, May 1945.

institutions are maintained under the control of the Roman Catholic Church. Two have relationships with Protestant denominations. One is maintained by the Y.M.C.A., and the others have no affiliations.

Table 28 gives certain essential facts about these institutions.

TABLE 28

PRIVATELY CONTROLLED INSTITUTIONS IN MARYLAND THAT DO NOT
RECEIVE SUPPORT FROM PUBLIC FUNDS

Name of Institution	Location	Sex of Students	Accreditation*	Enrollment, Autumn, 1946	Tuition Fee
Baltimore College of Commerce....	Baltimore	Coed	C	1,050	\$240
College of Notre Dame of Maryland.	Baltimore	Women	B-C	474	300
Goucher College.....	Baltimore	Women	A-B-C	624	600
Hood College.....	Frederick	Women	A-B-C	496	400
Loyola College.....	Baltimore	Men	B-C	660	350
Maryland College for Women.....	Lutherville	Women	....	230	400
Mt. St. Agnes Junior College.....	Baltimore	Women	B-C	195	260
Mt. St. Mary's College.....	Emmitsburg	Men	B-C	600	410
Peabody Conservatory of Music....	Baltimore	Coed	....	691†	.....
St. Charles College.....	Catonsville	Men	B-C	142†	400
St. Joseph's College.....	Emmitsburg	Women	B-C	193	200
St. Mary's Seminary and University.	Baltimore	Men	C	474	.....
University of Baltimore.....	Baltimore	Coed	C	584	300
Westminster Theological Seminary..	Westminster	Coed	D	54	110
Woodstock College.....	Woodstock	Men	B-C	150	.....
				6,617	

* Symbols used for accreditation are as follows: *A*—Association of American Universities; *B*—Middle States Association of Colleges and Secondary Schools; *C*—Maryland State Department of Education; *D*—American Association of Theological Schools.

† 1945-46 data.

Two of the colleges, Mt. St. Mary's and St. Joseph's, are fifty-one miles from Baltimore. Hood College and Westminster Theological School are forty-seven and thirty miles respectively from Baltimore. All the other privately controlled and nonpublicly supported institutions in the state are located in or near Baltimore. Approximately 80 percent of the students attending this type of institution are in those in the vicinity of Baltimore.

It will be observed from Table 28 that only three of the institutions hold the highest possible accreditation for their type; two are on the approved list of the Association of

American Universities, and one is accredited by the American Association of Theological Schools. Seven of the remaining institutions have been accredited by the Middle States Association of Colleges and Secondary Schools. Three hold only accreditation by the Maryland State Board of Education. Two are not listed by any recognized accrediting agency. Two colleges with the highest possible accreditation enroll 1,174 students; those with accreditation by the Middle States Association enroll 2,414; those with no accreditation or only state recognition enroll 3,489, or almost half of the total students that attend nonpublicly supported institutions in Maryland.

The privately controlled institutions that do not receive public support in Maryland are predominantly single-sex schools. Only five of the sixteen are coeducational. These five coeducational institutions enroll a total of 2,839 students, approximately 40 percent of the total.

In general, the privately controlled institutions charge relatively high tuition fees. The principal exceptions are certain theological seminaries.

The survey staff made a special inquiry among the nonpublicly supported institutions of higher education in Maryland with reference to their plans for the expansion of their facilities to serve larger numbers of students. The great majority of these institutions report that they do not plan to extend their facilities at all, preferring to keep their student bodies at about the pre-war level. Where plans are being considered for expansion, they will care for relatively small numbers of additional students.

The fact that the privately controlled institutions in the state are not planning to extend their facilities is extremely important, in view of the facts shown in chapter i regarding the increases in college enrollments that have occurred in 1946-47 and the prediction of probable continued increases for several years in the future. It is apparent that the greatly increased number of young people who will want higher education in the coming years will probably not be cared for in the privately controlled institutions of the state. There

thus devolves upon the state the obligation of providing the facilities that will be necessary to care for practically all the expansion in enrollment that is to occur in the future. In other words, if the young people of Maryland are going to have opportunities for higher education in increased numbers, comparable to the opportunities that are being developed in other states, there will have to be considerable expansion of the facilities for higher education in Maryland's publicly controlled institutions. The obligation upon the state is inescapable and its importance cannot be overemphasized.

III. PUBLIC CONTROL OF HIGHER EDUCATION IN MARYLAND

The final control exercised by the State of Maryland over its institutions of higher education resides in the legislature, as it does in all other states except those in which a state university is set up under constitutional authority as an independent agency. The legislature maintains some direct control through its power of appropriation of funds. The responsibility for direct and continuing control of each of the Maryland institutions is lodged by the legislature in a constituted board; the plan for the appointment of the members of each board is determined by the legislature. The board chosen for each institution has general control over the detailed operations. It chooses a president to be the chief executive officer of the institution, who in turn recommends appointment of subordinate executives and faculty members. These lines of authority—from the legislature through the appointing agency to the board of trustees and the president—constitute the regular channel for the state's control over its institutions of higher education.

Other controls than those directed through the institutional board exist by reason of the responsibilities assigned by the legislature to various other state agencies, such as the State Budget Director, the State Board of Public Works, the State Employment Commission, and the State Planning Commission. These other agencies have no immediate responsibility for educational programs as such, but they have authority over certain state-wide activities which happen to affect the operations of educational institutions. As might be expected, some confusion and conflict results from the controls that operate through these indirect channels, because of actions which seem to contravene the authority and responsibility established through the direct control by the various institutional boards.

CONTROL THROUGH THE APPROPRIATION ACT

A brief comment may first be made with respect to the nature of the control exercised by the legislature through appropriations made to the state institutions of higher education.

In the case of all the institutions with the exception of the University of Maryland, the legislature passes an appropriation act which is in the form of a "line budget." In this appropriation act a great many details are specified, and the amount which may be expended for each item is specifically indicated. In the operations of the budget the institutions are thus limited narrowly with respect to the use of all the funds. Even the funds which originate within the institutions are subject to this detailed appropriation act and must be expended in accordance with it. The appropriation act provides specified amounts for each organizational unit at the University of Maryland, but does not go into detail with respect to the purposes of expenditures within each of these fairly broad categories, other than to specify amounts for salaries and for all other objects.

The budget is provided for a biennial period. Its preparation must be started by the institution about six months before the meeting of the legislature. This is practically three years before the end of the fiscal period which the budget must cover. To ask the authorities of an educational institution to forecast in every detail what its needs for funds will be so far in advance imposes an obligation that is almost impossible to discharge effectively.

The situation in the Maryland institutions would be greatly simplified if the legislature, after seeing that the budget requests are fully justified with respect to detailed plans and projects, would make appropriations as a lump sum to each institution to be expended at the discretion of institutional authorities, under adequate supervision by the educational board that is in final control of the institution. Long experience with educational operations has indicated that a lump-sum appropriation will enable a state to obtain the greatest amount of service for the funds it makes available.

To tie an institution's program rigidly to the details of a budget made long in advance is certain to result in failure to provide for some needs that will later become important, and to encourage the spending of money for projects which later prove to be of less significance than originally estimated. The lump-sum budget plan throws considerable responsibility on the administrative officials and the controlling boards of the institutions, but this is exactly where the responsibility should rest for obtaining the largest possible educational value from the state's appropriations to its institutions. A complete financial report by the institution at the end of each fiscal year will indicate whether the funds are being wisely administered in accordance with sound public policy.

The authority exercised by the legislature other than through the appropriation act, as explained above, is channelled through the two main lines of continuing control. In the present chapter the first section will be devoted to a discussion of the situation in Maryland with respect to control through the institutional boards. The second section will relate to the controls exercised through the other state executive agencies.

BOARDS FOR INSTITUTIONAL CONTROL

The control of the publicly supported program of higher education in the State of Maryland is vested in a number of different boards. The Board of Regents of the University of Maryland and Maryland State Board of Agriculture controls the University of Maryland and Princess Anne College, the Negro land-grant college of the state. The State Board of Education and Trustees is in control of the State Teachers Colleges located at Frostburg, Salisbury, and Towson for white students, and at Bowie for Negro students. Morgan State College for Negroes has a separate Board of Trustees. St. Mary's Female Seminary also has a separate Board of Trustees. The Montgomery Junior College is under the immediate supervision of the Montgomery County Board of Education, and the Hagerstown Junior College is under the

Washington County Board of Education; both these institutions, as part of the public school system, ultimately come under the authority of the State Board of Education. An additional source of state control over the program of higher education in Maryland is found at Washington College, which has twelve of the twenty-five members of the Visitors and Governors appointed by the governor of the state; twelve others are elected by the alumni of the College; and the twenty-fifth, the president, is elected by the other twenty-four. The Coppin Teachers College, an elementary teacher training institution for Negroes in Baltimore City, is under the control of the Baltimore Board of School Commissioners.

The control exercised by the local school boards in Baltimore City and Montgomery and Washington counties will be neglected in the remainder of this discussion, inasmuch as such boards operate under the authority of either the State Board of Education or the separate charter for the City of Baltimore. For purposes of this discussion, Washington College is considered as a privately controlled institution, in accordance with the decision reached by the federal government a number of years ago when Washington College made application for funds for plant development; the control of this institution is not discussed further for that reason.

There are, it will be observed, a total of four boards for the eight state-controlled institutions. One of these, the State Board of Education, controls four institutions. Another, the Board of Regents of the University of Maryland, controls two institutions. The other two boards each control one institution.

Terms of Board Members

The four boards for the control of state institutions are not constituted according to the same pattern. The Board of Regents of the University of Maryland consists of eleven members, appointed for nine-year terms. The State Board of Education consists of seven members appointed for seven-year terms. The Board of Trustees of Morgan State College

consists of nine members appointed for nine-year terms. The Board of Trustees for St. Mary's consists of twelve members appointed for six-year terms.

Authorities on college and university administration generally recommend that a board for the control of a state institution of higher education should consist of from seven to eleven members. All the Maryland boards fall within this range except that for St. Mary's Female Seminary, which exceeds the upper limit by only one member.

The members of the state boards are all appointed for relatively long terms. This is sound policy and is in accord with the best administrative practice.

The dates of appointments of members for each of the boards are spread in such a way that a majority of the members will always have had two or more years of experience. Of the eleven members of the Board of Regents of the University of Maryland, one is appointed each year, except that twice during the nine-year cycle two members are appointed during one year. One appointment is made each year to the State Board of Education, and Morgan State College also has one new member appointed each year to its Board of Trustees. Four new members are appointed every two years to the Board of Trustees of St. Mary's Female Seminary. It is commendable that the plans for setting up the institutional boards have provided for staggered appointments so as to prevent too rapid a change in the personnel controlling the state institutions.

All appointments to membership on the boards for the institutions of higher education in Maryland are made by the governor of the state. Inasmuch as the governor can succeed himself in office, this plan would allow a governor who is elected for a second term to appoint a majority of the board members in all the state institutions of higher education. That this situation has apparently never caused any difficulty in Maryland is probably due to the kind of men who have been elected as governors. Other states, through bitter experience, have found it wise to set up appointing procedures in such a way as to prevent a possibility of any one governor

ever having the power to appoint a majority of the board members for any institution.

Any educational program must have an orderly development under long-continuing and gradually evolving policies. Unless a college or university is free from the vicissitudes of partisan politics, it can never amount to much as an educational institution. Able educators are usually unwilling to associate themselves with an enterprise where their freedom of teaching and research is likely to be interfered with by some politician temporarily in power. As previously noted, there seems to be no record of any unfortunate interference in the state institutions of Maryland, yet it must be remembered that such interference is always a potentiality under the present system of appointing board members for the Maryland institutions of higher education.

Even if the governor did not have an opportunity to succeed himself in office, there is always the possibility that some aspiring demagogue might demand resignations from existing board members in such a way as to give him immediate control over one or more of the educational institutions. The wisdom of the voters in always selecting the right kind of man for governor is the only protection the institutions have under the present system in Maryland. A single mistake in the choice of a man for governor could quickly wreck long years of hard-won progress in an educational institution, for a college or university is usually a long time in recovering its status after an attack by some politically minded spoilsman with power in his hands.

In a state where the governor may not succeed himself it is relatively easy to arrange the terms of board members and the times of their appointment in such a way as to permit no one governor to appoint a majority of the board. In such states it is common to require the confirmation of the governor's appointments by one or both houses of legislature. Even such an arrangement would not provide satisfactory assurance in Maryland where the governor can succeed himself. In one or two states the appointments by the governor are limited to selection from a slate of two or more candidates

for each position, named by agencies or groups which have no direct political connection. Consideration has been given, in recent surveys of higher education in other states, to recommendations along these lines.

Occupational Distribution of Board Membership

The personnel of the various boards for the control of Maryland's state institutions of higher learning shows a wide distribution over the various occupational fields. In no institution are more than one third of the board members drawn from a single occupation or profession. Morgan State College, with three from the legal profession and three from teaching among its nine board members, represents the nearest approach to a narrow concentration. It is a wise policy to distribute board membership so as to represent widely diversified occupations, for in that way many different points of view can be brought to bear on questions involved in the maintenance of a college or university.

Some occupational groups are not represented on the boards that control Maryland's institutions of higher education. The board members tend to be drawn almost exclusively from the ranks of professional people, business men, farmers, and housewives. No persons from the field of labor are serving on the state boards for the control of higher education in Maryland, yet this group constitutes a large bloc of the population, and its influence and ideas are increasingly needed in the direction of educational programs.

Operations of the Boards

The survey staff did not make a detailed study of the manner in which each institutional board operates, but certain general impressions were gleaned in the visits to the institutions. The general criticism may be made that the boards are not as active as they might well be in the oversight of the institutions for which they are responsible. Of the four boards, that of Morgan State College seems freest from this type of criticism. At Morgan State College the board has

been diligent in its exercise of control, and some of the board members have been especially generous in devoting their time to the welfare of the institution.

The Board of Regents of the University of Maryland would probably rate a strong second to the Morgan State College board. The Board of Regents, however, seems not to have given as much attention to a detailed consideration of problems and policies affecting the development of the University as might have been warranted. Too many decisions are left completely to the administrative officers of the University, without review by the Board of Regents or its committees. A special instance of neglect by the Board of Regents is evidenced by the conditions at Princess Anne College.

The State Board of Education has manifold activities under its general control. The supervision of the elementary and secondary schools in the counties of the state is a large and responsible task, and this responsibility apparently leaves the State Board of Education little time for any intensive consideration of the problems at each of the four state teachers colleges. The tendency is for the State Board of Education to delegate its responsibility for the state teachers colleges largely to the State Superintendent of Education, who thus becomes a sort of chancellor over the four state teachers colleges. The maintenance of such an executive office is entirely proper, but it should not mean that the board itself is left with only remote contact with the institutions.

The board of St. Mary's Female Seminary seems to be the least active of the four, in so far as attention to the affairs of the institution is concerned. The President of St. Mary's Female Seminary has great difficulty in even getting a quorum to attend board meetings, and the board seems to have done little toward improving the status of the institution. The President of St. Mary's Female Seminary reports that in earlier days the institution had some very interested members on its board, but when their terms expired they were not reappointed for some unexplained reason, and their successors have never taken the interest in the institution that is necessary to effective service as a board member.

The criticisms here made of the manner in which the members of the state institutional boards discharge their responsibilities should not be taken to mean that board members should themselves step in and assume executive functions. That would be worse than the condition which is here criticized. There is no evidence that such a violation of such good practice has occurred in any of the state institutions and the board members should be commended for their policy of leaving executive management to the appropriate officials within the institutions. Though it is certainly sound administration to leave matters of institutional management and the carrying-out of institutional policies in the hands of properly qualified executive officers, this does not mean that the board members should sit back and do nothing. They have an important obligation to be fully informed about the activities and problems of the institution, to pass judgment on all policies, to consider carefully all recommendations for appointment to major positions on the teaching and administrative staff, to scrutinize the results of operations carefully, and to assist in bringing the institution to the favorable attention of the constituency on all appropriate occasions. It is in respect to the discharge of such responsibilities that most of the present boards in Maryland seem to fall short.

POSSIBILITIES OF CENTRALIZED CONTROL

The fact that higher education in Maryland under state auspices is controlled through four completely independent boards means that there is no legal procedure for the coordination of the programs of the various institutions. The state teachers colleges have achieved coordination of their programs through the medium of a single board, the State Board of Education, which is in control of all the state teachers colleges. Perhaps it could be argued that the University of Maryland and Princess Anne College have been coordinated through the single Board of Regents; but the coordination under the one board in this instance certainly has not been a benefit to the program in the College for Negroes, and there is little or no evidence of cooperative relationships between

the two institutions or even of an interest in the welfare of Princess Anne College on the part of the Board of Regents.

In a real sense, because of their separate boards of control, the state institutions of higher education compete among themselves for supporting funds. Each institution or group of institutions goes independently before the State Budget Officer, the governor, and the legislature in making its request for appropriations. These state officers cannot be expected to have sufficient wisdom to coordinate a complicated system of educational institutions, but the offices of the State Budget Director and the governor and the legislature are the only points where effective coordination can be enforced in the present organization of control for higher education in Maryland.

The tendency in a number of states in the past two decades has been to lodge the general control over all the state institutions of higher education in a single board. This board is commonly supplied with a chief executive officer, sometimes known as a chancellor, who has responsibility for the oversight of all the institutions. Within each of the institutions there is a president and the usual staff of subordinate administrative officers. The presidents of the institutions are responsible to the chancellor of the institutions of higher education and, through him, to a single state board of higher education. Such a plan has much to commend it. It could readily be applied to Maryland.

There is a debatable question as to whether the public schools of the state should also be under the same board that is set up for the control of higher education. In some states such as Idaho, Montana, New York, and Florida, this arrangement is in effect. Such a plan has the great advantage of providing opportunity for coordinating the elementary and secondary schools with the system of higher education, as well as the advantage of coordinating the services of the various institutions at the college and university level. In other states two separate boards are maintained, one for the control of elementary and secondary schools and one for the control of higher institutions. This latter plan might be practical as

a first step toward the solution of the problem in Maryland, although complete centralization of all education under a single board seems the best ultimate solution.

If the intermediate step were taken to create a single Board of Higher Education in Maryland, it would seem advisable to place the state teachers colleges under that board instead of leaving them under the State Board of Education. The State Board of Education can maintain all the controls that are needed over teacher education by the device of certification requirements for teachers. At present the State Board of Education controls only the institutions that provide preparation for elementary teachers (and is not in control even of all of those); it has no control over the institutions that prepare secondary school teachers. It would, therefore, seem that there could be no sound objection on educational grounds to placing the state teachers colleges under a separate Board for Higher Education, if such an agency should be created for the coordination of the various state institutions.

If the ultimate step is taken and all education is placed under a single State Board of Education, the chief executive officer of that board should be the State Superintendent of Education. Possibly the title "State Commissioner of Education" would be more appropriate. That officer, however, would need an especially qualified assistant to handle problems relating to higher education. The State Superintendent of Education, with this assisting staff member, would really serve as a chancellor of higher education. Because of the great responsibility involved, the assistant would have to be fully as competent as the most capable president in any of the other institutions. The assistant could probably be best designated by some title such as "Associate Commissioner for Higher Education."

The development of some plan for centralizing the control of the various institutions of higher education in Maryland seems to be an important step that might readily be taken at this time. As previously noted, several states have moved in this direction during the past twenty or twenty-five years.

Each state has worked out a plan that has seemed best suited to its peculiar circumstances and there is no one plan that can be recommended as universally "the best." The state authorities and the leaders of education in Maryland could well study the possibilities of obtaining a unified control of higher education through a single board with a competent executive officer.

Control of Negro Higher Education

The control of Negro higher education involves special problems in the State of Maryland owing to the policy of maintaining separate facilities in the State of Maryland. The survey staff has obtained the following legal opinion regarding the basis of the separate schools for Negroes.

A study of the Maryland legal materials applicable to the segregated-school problem discloses that such segregation policy as public officials may wish to impose is not only not necessary constitutionally, but, rather, is severely restricted by principles of American constitutional law. It is not *required*, but only *permissible*, and that within strict constitutional limits, to segregate the races.

Such segregation as there is results from State Legislation which assumes the policy in bond-issue Legislation, appropriation bills, and certain State-wide Legislation which permits, rather than requires the policy to be put in force, by permitting the establishment of separate schools when a judgment is made as to the necessity from the standpoint of racial population. State-wide Legislation creating and providing for the management of separate institutions of higher education also represents the making of such a judgment.

Even to the extent to which such a judgment as to maintaining the separate schools is tolerated or is in force, the courts have been zealous to restrict the segregation policy by requiring, as a condition to the exclusion from the facilities for white pupils, that the separate ones maintained for Negroes shall be truly equal in scope. Thus, for lack of any separate library-training facilities, and because provision for out-of-State scholarships does not equal local training in law, it has been determined that all races must be admitted to the library, legal, and

other professional facilities which the State affords. Within the framework of separate facilities, for grade and high school education, where a minimum salary scale is to be guaranteed either race, teachers of all races, in schools for all races must be guaranteed the same minima for the same qualifications.

While it has been determined that it is not the equivalent of affording library-school training by appointing librarians without training or of legal education by granting scholarships for out-of-State education, it still remains to be decided what the cases mentioned above have left undecided, whether it is the equivalent of high school education to send the student to another county with tuition paid, and whether it complies with the Constitution to appropriate public money to private schools that have a policy of racial exclusion.

Considerable has been done in the way of minimizing the segregation policy of the State and any attempt at exclusion of all races from educational facilities, although there still remain some problems to be solved. As the law now stands, segregation seems indicated as a State policy, although only as a permissive one for two separate reasons: (1) the discretion in the governing bodies of the various school boards and institutions not to organize and finance segregated ones; and (2) the constitutional necessity, supervised by the courts, of admitting all races to any facilities intended only for whites alone if no truly equivalent separate facilities be provided.

In the last analysis, the principal guarantee of such equality of educational opportunity as is now given all races in Maryland, as in the rest of America, lies in the watchfulness of the courts, both State and Federal, over the point of what constitutes genuine equality of education whenever segregation as a State policy is asserted. Only if the State otherwise provides what the courts will accept as true equivalence of opportunity will the courts tolerate any exclusion of any race from any facility provided.

Negro leaders have proposed a method by which a better assurance of fair treatment can be given in the field of Negro higher education. It is suggested that any board which has the control of an institution for Negro students should have at least one Negro member. At present Morgan State College

has a mixed board, but neither the University of Maryland Board of Regents nor the State Board of Education has on it any Negro members. A suggestion of Negro representation on controlling boards is one that might well be considered in drawing up plans for the coordination for the control of higher education in Maryland.

Whatever the plans for the control of higher education through a board or boards may be, the members of such a board or boards must continually remember that there is the moral and the legal obligation to provide equal opportunities for Negroes and white students whenever separation of the races for education is required. This condition is clearly not met in Maryland at present, except in the case of the provision for the education of elementary teachers at Bowie State Teachers College.

CONTROL EXERCISED BY EXECUTIVE STATE AGENCIES

As explained at the beginning of the chapter, the Maryland institutions of higher education are subject to state control not only through their appointed boards but also through certain executive agencies of the state government. The executive agencies through which this second type of control is maintained is as follows: (1) State Budget Director; (2) State Board of Public Works; (3) State Purchasing Bureau; (4) Commissioner of Employment and Registration and the Standard Salary Board; (5) State Planning Commission.

The control that the legislature has given to these non-educational agencies in the state government has subtracted much from the authority for the management of the institutions that would normally be expected to be exercised through the line of control that extends from the state through the various boards that are nominally in charge of the institutions. The operations of each of these state agencies with respect to higher education will be discussed in turn.

State Budget Director

Each of the institutions must submit its request for funds to the director of the State Budget Office. The budget director holds a conference with the responsible head of each institution in which the latter makes justification of the amounts estimated as needed appropriations. The amounts finally determined by the Director of the State Budget Office as the needed appropriations for the institutions may not be increased by the legislature but may be decreased.

The State Budget Office represents a type of fiscal control that is entirely necessary and appropriate in the management of state affairs. The present operations of the system in Maryland, however, are open to certain criticisms.

In the first place the limitation which the Constitution has placed on the legislature's power to increase the amounts recommended by the budget director unless a special tax is levied, puts a great deal of authority in the hands of the governor and the State Budget Director. Arbitrary exercise of this authority by the State Budget Director or the governor, for example, could demoralize the program of any institution or even completely wipe out all its financial support. In the operations of the budgetary procedure of the federal government, the Congress retains the power to appropriate larger amounts than are recommended by the Bureau of Budget. It might be well in Maryland to give the legislature authority to appropriate to any institution up to 75 percent of the amount provided in the previous biennium, even though the budget director recommends a reduction below the amount.

In the second place, the authority of the budget director is assumed to extend to the determination of the specific details within institutional programs for which appropriations may be made. Thus, the budget director can blue-pencil all kinds of projects and activities at an institution, even though these have been carefully planned by the administrative staff and controlling board of the institution. The budget director would even have authority to fix individual salaries of faculty members. It would seem that the au-

thority of the budget director should be limited to the determination of the total amount of the appropriation to be requested by the legislature or at least to the amounts within a few broad categories, but should not extend to matters of detail which concern the internal management of the institutions.

State Board of Public Works

The Director of Budget and Procurement is the executive officer of the Board of Public Works, and it is sometimes difficult to distinguish between actions of the Board of Public Works and those of the budget director of the State Budget Office. In general, the Board of Public Works has continuing supervision over the operating budgets of the institutions after appropriations have been granted by the legislature. For all institutions except the University of Maryland, the appropriations are made in a line budget, specifying in great detail the purposes for which the indicated amounts of expenditure may be made. Any revision of the expenditure program must be approved by the Board of Public Works, regardless of the source of income from which the expenditure is supported.

In the ordinary operations of an institution of higher education it is usually necessary to make many revisions and adjustments in the budget during the course of the fiscal year because of unforeseen conditions. In Maryland every item of this sort must receive approval from the Board of Public Works before an obligation can be incurred. There can be no objection to some sort of central state control over the total amount of expenditure or to a control of revisions in the budget that would affect the balance between income and expenditure. As at present operated, however, the control through the State Board of Public Works is open to certain criticisms.

In the first place the procedure results in considerable delays in necessary actions. Some actions must often be taken speedily in an institution to meet exceptional situations, but prompt actions on necessary budget revisions are often blocked under the present system of control in Mary-

land. For example, the number of students may prove to be greater than expected; but even though increased income from student fees may be available, the institution may not expand its teaching staff as needed to care for the additional students until there has been formal approval by the Board of Public Works.

In the second place, the procedure has operated to maintain a type of executive control over institutional programs which properly belongs to the Board of Regents or other boards directly in charge of institutions. Budget amendments have to be justified in detail in the same manner as the original budget requests. The decision on the desirability of a budget amendment should be a responsibility of the appropriate board for each institution. The authority of the Board of Public Works in budget amendments should extend no further than the effect on the balance between income and expenditure or the assurance that the expenditures will not exceed the amounts provided through the appropriations. The fact that some of the boards controlling state institutions of higher education do not now exercise this function of budget revision properly is no reason for assigning the responsibility to some noneducational agency. The policy should rather be to strengthen the institutional board and to require it to perform the functions that properly belong to it.

State Purchasing Bureau

Maryland operates under a highly centralized state purchasing system with the director of the budget also the director of procurement. Every purchase amounting to more than \$2.00 must have the approval of the State Purchasing Bureau before any commitment can be made. Thus, the State Budget Director has a double check on the finances of the institutions: (1) he makes final determination of the amounts that can be budgeted before the legislature enacts the appropriation bill; (2) he determines whether or not any specific item that is requested can be purchased in the ordinary operations of the institution after the appropriation is made by the legislature.

The pros and cons of centralized state purchasing have been argued for many years. There are obvious advantages in maintaining a central purchasing agency which can obtain the lowest possible prices because of quantity buying and which can presumably maintain a more highly skilled staff of purchasing agents than any individual institution could possibly afford to employ. The disadvantages of a centralized purchasing system when applied to an institution of higher education, however, are numerous.

In the first place, there is nearly always an unfortunate delay in obtaining materials that are needed because of the necessity of routing requisitions from the institution to the State Purchasing Office. The Maryland Purchasing Bureau, moreover, has issued definite schedules indicating the months in which certain articles may be bought. For example, library books may be ordered only on three or four fixed occasions during the year. If a professor needs certain library materials for his classes, he must ordinarily wait until the schedule permits the ordering of library books. The routing of requisitions, vouchers, and invoices is so complicated in Maryland that it becomes almost impossible to pay bills promptly enough to obtain cash discounts. This type of delay, according to testimony at practically all the institutions, now costs the State of Maryland a considerable amount of money in the operations of its educational institutions.

In the second place, the State Purchasing Bureau has presumed to dictate to the institutions what they may purchase. In its efforts to standardize all types of materials furnished by the state, it has often neglected the peculiar needs of the educational institutions. For example, the supplies for the college and university dining halls are expected to be identically the same as those provided for the state prisons. Purchase of a special type of chinaware requested by an educational institution was rejected by the State Purchasing Office, even though the funds were available for financing the purchase. This type of control over the internal operations of the educational institutions cannot be exer-

cised wisely by a central state agency that is not primarily concerned with educational affairs.

The solution that seems desirable, in order that full advantage may be taken of the economies of a centralized purchasing program, is to require the purchase through that agency of only such supplies and materials as are of relatively standard character. A list of such items could readily be drawn up, and all other needs could be met by purchases made through the local institutions. In emergencies institutions should have authority to make purchases of even standard items of supply in quantities sufficient to last until regular stock could be received.

State Employment Commission and Standard Salary Board

Maryland has a merit system or civil service plan for state employees. The plan does not cover the professional staff members of the institutions of higher education, such as those on the faculty, but it does cover all other employees. A state civil service system has much to commend it, but its application to an institution of higher education runs into certain important difficulties.

In the first place the merit system results in an unfortunate division among the staff members of the institution between those who are on state civil service and those who are not. The civil service employees work under regulations handed down by the state office, while others have their working conditions determined locally within the institution. Thus, the hours of duty, arrangements for vacations and sick leave, and more recently changes in salaries, have been determined separately for the two groups of employees in the state institutions of higher education. This has created a situation detrimental to the morale of staff members.

In the second place, certain members of the institutional staff, whose duties are certainly professional and highly specialized in character, are under the merit system and are thus selected and assigned to their jobs by the State Employment Commissioner rather than by the institutional

authorities. This applies particularly to such professional personnel as the business manager, the registrar, and the librarian. By some curious circumstance, the latter two classes of officials in the University of Maryland are not under the state merit system, but at all the other state institutions these types of officers are under the merit system.

It is perhaps not adequately realized that such officials as the business manager, the registrar, and the librarian are highly specialized staff members in institutions of higher education, and the manner in which they perform their functions directly affects the instructional services. It is unfortunate to have the state civil service agency assign someone as business manager at a college when that person has had no preparation or experience that fits him directly for such a responsible position. A registrar for a college or university has a wholly different responsibility from that of a record-keeper at a hospital. The librarian at a teachers college has duties quite different from the librarian in a penitentiary. In most well-managed institutions the registrar and the librarian and often the business manager are considered members of the academic staff and are accorded faculty status. It would seem advisable to review the types of positions that are under the merit system and to place those that are of true professional status on a basis comparable with faculty positions.

In the third place, the program of employment under the merit system is complicated and often results in long delays in filling positions. In large numbers of instances it seems in recent years that the State Employment Commission has been unable to provide the types of employees needed by the institutions, and the institutions have been forced to set up their own programs of personnel procurement. Employees obtained through the institution itself, however, cannot be given permanent status until they have been ultimately cleared by the State Employment Commission. The whole procedure of the merit system is surrounded by so much red tape as to be quite time-consuming and cumbersome in the operations of the institution. At the University of Maryland, for example, one major staff member must devote practically

his full time to these matters, and he requires the services of two or three clerks to keep up with all the details involved in personnel management under the merit system.

In the fourth place, the plan of obtaining personnel through the State Employment Commission makes for an unfortunate division of the loyalties of those employees. Persons on the merit system quite naturally look to the State Employment Commissioner as the person who obtained the job for them and who controls the regulations under which they work and the salaries they are paid. The responsible executive officers of the institutions are, therefore, stripped of certain powers over some of the personnel. In such circumstances it is difficult to obtain high morale or a true sense of loyalty on the part of employees.

In some states where merit systems for employees are in effect it has been found desirable to allow the institutions of higher education to set up their own systems independently of the general state plan. This is similar to the policy of the federal government in allowing the Tennessee Valley Authority to set up its own civil service independent of the regular federal Civil Service Commission. Particularly if the management of the state's program of higher education were centralized under a single board, it would be relatively easy to maintain a single personnel department that would in effect operate as the state civil service system for the state educational institutions. This is practically what has already been done in Maryland with employees having faculty status. There could well be a recognition of the fact that almost all employees of a college or university, even though they do not have direct instructional responsibilities, must have certain peculiar qualifications that fit them for effective service in an educational institution.

Maryland State Planning Commission

All the projects involving building construction and plant expansion in the Maryland institutions of higher education are subject to review and approval by the State Planning Commission before they may be acted upon by the legisla-

ture. The State Planning Commission performs a necessary and effective service in coordinating capital-outlay programs for various agencies. Long-range planning for capital development is certainly a wise arrangement, and the responsibility of the State Planning Commission as it touches the institutions of higher education in this respect is well placed.

At present the State Planning Commission does not have an adequate staff for an effective appraisal of the real needs of the various educational institutions for plant extension. These are matters on which professional educational judgment is required. Furthermore, the needs for building construction are clearly tied in with the educational program that is to be developed. By approving or refusing to approve certain additions to the plant at a state institution of higher education, the State Planning Commission can effectively control the services that the institutions may render. To a certain extent the analysis of plant facilities that has been made as a part of the present survey can be utilized by the State Planning Commission for current appraisal of the needs of the various institutions for capital-outlay projects. Within a few years, however, the observations made in this survey will be out of date, and new appraisals will be necessary. It would seem that some special arrangement should be made for a continuing study of plant needs at institutions of higher education. The discretion of the State Planning Commission, however, should not extend to matters involving educational policies, such as a decision to develop new instructional programs, but should be limited to matters such as the total amount the state can furnish for educational-plant needs and to the problems involved in equalizing the general quality and adequacy of the physical plants at the various institutions. Judgments should be supported on as objective a basis as possible, with a clear indication of fair treatment to each of the institutions of higher education.

Recently the State Planning Commission has offered to extend its services beyond the fields involved in capital outlay and construction of buildings and to attempt some coordination of research programs carried on within various state agencies. It seems doubtful that the State Planning Com-

mission would be competent to supervise the research programs in a state university. Much of that research is done under grants of federal funds or with funds supplied from other than state sources, and hence should not be under the direct supervision by the state. A general control over research programs involves a high degree of technical competence, and it is doubtful whether the State Planning Commission could develop a staff broad enough to cover adequately the varied forms of research in which a university continually engages. This proposed extension of the service of the State Planning Commission into the coordination of research activities should be studied carefully in the interests of effective service to the state, before any definite steps are taken in this direction. The survey staff is reliably informed that the State Planning Commission has no present intention of asking for authority to supervise the research programs of the University and that its "coordination" would extend no further than a simple listing of projects under way.

General Conclusions Regarding Control by State Executive Agencies

In one detail the control exercised by certain of the state executive agencies over the University of Maryland is in violation of federal statutes. The University of Maryland has been designated by the state legislature as the recipient of the Morrill-Nelson funds supplied by the federal government. According to federal legislation and regulations, the state legislature has authority only to designate the institution which is to be the recipient of these funds. The legislature does not even have to appropriate these funds to the institution once it has designated it as the recipient. Expenditures of such funds, according to federal statutes and interpretations, are specifically exempt from any form of state control outside the institution. Thus, the types of control maintained by Maryland through its State Budget Director, its Purchasing Bureau, and the State Employment Commissioner over programs supported by the Morrill-Nelson funds are in direct violation of federal statutes.

The general tendency toward centralization of functions that has taken place in state governments in recent years has, in many states, run into conflict with long established practice in the control of institutions of higher education. In general, educators have held strictly to the opinion that it is only when an institution is free to direct its own affairs that a successful educational program can be maintained. Whenever outside authorities such as a State Budget Commission, State Purchasing Bureau, etc., are given authority that permits them to control the internal operations of an institution, the educational program is almost certain to suffer. Such a type of control almost invariably results in less education and a poorer quality of education than could otherwise be provided from the funds available. An excellent reference on this subject that should be consulted as a guide in working out plans in Maryland is the book by Elliott, Chambers, and Ashbrook, entitled *The Government of Higher Education* (American Book Co., 1935).

Many of the economies that on the surface seem both possible and probable in the centralization of some functions, such as purchasing and employment of personnel, vanish entirely when the operations of the system are examined closely. The survey staff found the executive officers of the Maryland institutions quite generally of the opinion that the present plans of centralized control over such functions as the details of the budget, the purchase of materials, and the employment of personnel were costing the state more than was being saved, and that the educational operations were made both less effective and more expensive than they would be with a larger degree of autonomy left in the hands of local institutional authorities. The observations of the survey staff strongly support this opinion.

While the survey staff is convinced of the soundness of the observations of the institutional authorities regarding the unsatisfactory nature of the controls at present exercised by state executive agencies, the solution does not seem to lie in the complete abandonment of such controls. It should be possible to work out operating procedures which would limit the

areas of the control through state executive agencies to those matters on which some centralization seems clearly desirable. On other matters it would be best to let the institutional authorities manage their own affairs within the limits of the appropriations made by the legislature. If an institutional administrative officer proves incapable of handling an appropriation wisely, the solution should be his replacement by one who is capable of doing the job satisfactorily rather than the imposition of superior controls lodged in noneducational agencies of the state government. A strengthening of the institutional boards of control and increased diligence on the part of such boards should be encouraged as the best method of safeguarding the interests of the state in the effective use of appropriations.

The suggestion that has been made earlier in this chapter with respect to the coordination of control over the educational institutions through a single State Board of Higher Education would offer an important solution to the vexing question of control through state executive agencies. If there were a central board for the control for all higher education with a responsible executive officer, that agency could well be granted much of the authority over budget revisions, purchasing, and employment of personnel that now is assigned to other noneducational agencies within the state. Without changing the system of control over these functions, the responsible head of the state system of higher education could be designated as a staff member of the various budgetary, purchasing, and personnel organizations so that policies in these fields would be coordinated for all state activities, and yet the institutions would be left without outside interference in these matters of internal administrative concern.

The problems of state control over institutions of higher education have reached a critical point in Maryland. On every side the survey staff found dissatisfaction with the present arrangement. These problems will rapidly become more acute as the volume of service increases in the state institutions of higher education. This would be an appropriate time to introduce reforms to correct the present deficiencies.

IV. FINANCING OF HIGHER EDUCATION IN MARYLAND

The financing of higher education in any state involves a number of specific problems. A general view of the adequacy of the support of higher education in a state such as Maryland may be obtained by comparing the total income and expenditures for such purposes with similar data for other states of the United States. It is important to analyze the sources of income and purposes of expenditures within a state. The system of financial accounting and the budgetary and auditing procedures must also be considered. In the State of Maryland the policy of making appropriations to certain privately controlled institutions requires critical examination.

COMPARISONS OF THE FINANCIAL SUPPORT OF HIGHER EDUCATION IN MARYLAND AND IN OTHER STATES

Table 29 presents a tabulation taken from data published by the U.S. Office of Education,¹ showing the total educational and general income of all institutions of higher education in each state for 1941-42. In this tabulation the institutions are classified according to type of control. The data for 1941-42 are the latest that have been published. They are fairly representative of pre-war conditions, inasmuch as the finances of the institutions in that year were not yet affected appreciably by the war. These data are, therefore, much more representative of normal conditions than any data that might be presented for more recent years. The items of income reported in this table exclude amounts designated for capital outlays or for noneducational purposes such as interest or retirement of indebtedness. Also excluded are amounts involved in operating dormitories, dining halls, student unions, and other noninstructional activities within the institutions.

On the total income for all higher institutions combined, Maryland ranks twenty-first among the states. It achieves this high rank largely because of the income enjoyed by the institutions under private control. Considering only the pri-

¹ *Statistics of Higher Education, 1939-40 and 1941-42*, Biennial Survey of Education, Vol. II (Washington: Government Printing Office, 1944), pp. 76-78.

TABLE 29

TOTAL EDUCATIONAL AND GENERAL INCOME OF ALL INSTITUTIONS OF HIGHER EDUCATION
IN EACH STATE, CLASSIFIED BY TYPE OF CONTROL, 1941-42

STATE	INSTITUTIONS UNDER PUBLIC CONTROL		INSTITUTIONS UNDER PRIVATE CONTROL		ALL INSTITUTIONS COMBINED	
	Amount	Rank	Amount	Rank	Amount	Rank
Alabama.....	\$6,327,424	19	\$2,183,299	26	\$8,510,723	22
Arizona.....	2,301,795	36			2,301,795	45
Arkansas.....	3,921,934	29	714,633	39	4,636,567	35
California.....	29,391,359	1	16,768,044	5	46,159,403	2
Colorado.....	5,573,294	20	1,629,519	27	7,202,813	27
Connecticut.....	2,391,877	35	10,337,453	7	12,729,330	16
Delaware.....	847,338	48	46,565	45	893,903	49
District of Columbia.....	375,164	49	6,054,081	12	6,429,245	28
Florida.....	3,890,186	30	1,405,062	31	5,295,248	33
Georgia.....	4,699,519	24	3,704,108	17	8,403,627	23
Idaho.....	2,169,989	38	258,584	42	2,428,573	43
Illinois.....	15,188,517	4	25,848,720	4	41,037,237	4
Indiana.....	12,720,390	7	5,660,144	13	18,380,534	9
Iowa.....	11,017,592	11	3,544,160	18	14,561,752	13
Kansas.....	7,878,189	14	1,623,212	28	9,501,401	20
Kentucky.....	5,287,453	21	2,513,245	23	7,800,698	26
Louisiana.....	8,408,331	13	3,320,947	19	11,729,278	18
Maine.....	1,938,308	42	1,442,248	30	3,380,556	39
Maryland.....	3,879,227	31	5,420,256	14	9,299,483	21
Massachusetts.....	3,429,003	32	31,899,965	2	35,328,968	5
Michigan.....	22,558,384	2	3,217,678	20	25,776,062	7
Minnesota.....	11,728,982	8	3,184,890	21	14,913,872	11
Mississippi.....	4,413,503	26	742,356	38	5,155,859	34
Missouri.....	7,579,819	15	8,233,500	9	15,813,319	10
Montana.....	2,061,513	40	250,727	43	2,312,240	44
Nebraska.....	4,721,962	23	796,608	36	5,518,570	31
Nevada.....	987,994	47			987,994	48
New Hampshire.....	1,674,593	44	2,343,534	25	4,018,127	36
New Jersey.....	2,019,655	41	10,293,642	8	12,313,297	17
New Mexico.....	2,195,763	37			2,195,763	46
New York.....	13,217,420	6	62,169,021	1	75,386,441	1
North Carolina.....	6,811,004	18	7,065,744	10	13,876,748	15
North Dakota.....	2,548,377	34	142,562	44	2,690,939	41
Ohio.....	15,022,766	5	13,173,687	6	28,196,453	6
Oklahoma.....	7,369,607	16	925,945	35	8,295,552	24
Oregon.....	4,793,341	22	1,202,151	34	5,995,492	29
Pennsylvania.....	11,414,727	10	30,290,492	3	41,705,219	3
Rhode Island.....	996,902	46	2,434,977	24	3,431,879	38
South Carolina.....	4,144,167	28	1,604,568	29	5,748,735	30
South Dakota.....	2,156,861	39	469,932	41	2,626,793	42
Tennessee.....	4,178,699	27	6,214,378	11	10,393,077	19
Texas.....	19,258,744	3	5,174,786	15	24,433,530	8
Utah.....	3,283,833	33	612,538	40	3,896,371	37
Vermont.....	1,758,662	43	1,233,764	33	2,992,426	40
Virginia.....	9,787,079	12	4,233,191	16	14,020,270	14
Washington.....	6,944,321	17	1,246,922	32	8,191,243	25
West Virginia.....	4,549,208	25	754,992	37	5,304,200	32
Wisconsin.....	11,512,532	9	3,114,299	22	14,626,831	12
Wyoming.....	1,277,952	45			1,277,952	47
Total, United States.....	\$330,794,692	.....	\$295,501,129	.....	\$626,295,821	.....

vately controlled institutions, Maryland ranks fourteenth in total income for educational and general purposes. On the basis of the income of the institutions under public control the rank of Maryland is thirty-first. This tabulation emphasizes the fact, pointed out earlier in this survey report, that Maryland depends on privately controlled institutions for higher education to a much larger extent than the typical state in this country.

Table 30 presents data, also taken from the U.S. Office of Education Biennial Survey,² showing the amounts of income contributed from state sources for education and general purposes in institutions of higher education in each state. As in the preceding table, the state appropriations are classified with respect to whether they were received in institutions under public control or private control.

On the basis of the total amount contributed by the state to the current support of educational programs of institutions of higher education, Maryland ranks thirty-fourth among the states. Maryland ranks thirty-sixth with respect to the amount contributed by the state to the support of publicly controlled institutions. Only four states exceed Maryland in the amount contributed by the state to institutions under private control. The situations in these four states deserve special comment because the nature of the contributions to privately controlled institutions differs considerably from the policy followed in Maryland. In three of the states—New York, Pennsylvania, and New Jersey—the amounts furnished by the state to private institutions are very much larger than in Maryland; in the fourth state, Ohio, the amount is only about 50 percent larger than in Maryland.

In New York the policy has been followed of setting up state colleges for instruction in certain professional fields in privately controlled institutions. Thus, located at Cornell University are the New York State College of Agriculture, the State College of Home Economics, and the State College of Veterinary Medicine; located at Syracuse University is the New York State College of Forestry; located at Alfred Uni-

² *Ibid.*, pp. 76-78.

TABLE 30

STATE CONTRIBUTIONS TO THE SUPPORT OF HIGHER EDUCATION IN EACH STATE
TO INSTITUTIONS CLASSIFIED BY TYPE OF CONTROL, 1941-42

STATE	INSTITUTIONS UNDER PUBLIC CONTROL		INSTITUTIONS UNDER PRIVATE CONTROL		ALL INSTITUTIONS COMBINED	
	Amount	Rank	Amount	Rank	Amount	Rank
Alabama.....	\$2,408,516	23	\$10,000	11	\$2,418,516	24
Arizona.....	1,299,027	34			1,299,027	36
Arkansas.....	2,157,993	27			2,157,993	28
California.....	15,895,054	1	1,200	16	15,896,254	1
Colorado.....	2,671,405	20	648	18	2,672,053	21
Connecticut.....	1,530,249	32			1,530,249	33
Delaware.....	367,402	48			367,402	48
District of Columbia.....						
Florida.....	2,706,291	19			2,706,291	20
Georgia.....	1,681,812	30			1,681,812	31
Idaho.....	1,242,953	35			1,242,953	37
Illinois.....	9,399,508	4	13,087	8	9,412,595	4
Indiana.....	6,849,096	5	141	20	6,849,237	7
Iowa.....	5,275,207	10			5,275,207	12
Kansas.....	3,800,221	15			3,800,221	16
Kentucky.....	2,406,775	24	3,600	13	2,410,375	25
Louisiana.....	5,823,482	9			5,823,482	11
Maine.....	998,702	41	1,550	15	1,000,252	41
Maryland.....	1,209,746	36	228,277	5	1,438,023	34
Massachusetts.....	2,287,561	26			2,287,561	27
Michigan.....	10,363,795	2	499	19	10,364,294	2
Minnesota.....	6,065,369	8			6,065,369	10
Mississippi.....	1,204,873	37	11,226	9	1,216,099	38
Missouri.....	4,296,119	14			4,296,119	15
Montana.....	1,015,903	40			1,015,903	40
Nebraska.....	2,337,449	25			2,337,449	26
Nevada.....	622,015	44			622,015	45
New Hampshire.....	687,087	43			687,087	43
New Jersey.....	1,104,909	39	1,903,635	3	3,008,544	17
New Mexico.....	1,135,216	38			1,135,216	39
New York.....	3,016,811	16	3,060,991	1	6,077,802	9
North Carolina.....	2,521,309	21	975	17	2,522,284	22
North Dakota.....	1,363,690	33			1,363,690	35
Ohio.....	6,585,241	6	393,335	4	6,978,576	5
Oklahoma.....	4,955,865	11			4,955,865	13
Oregon.....	2,856,516	18			2,856,516	19
Pennsylvania.....	4,639,140	12	2,322,022	2	6,961,162	6
Rhode Island.....	541,137	47	34,730	7	575,867	47
South Carolina.....	1,780,030	29	2,108	14	1,782,138	30
South Dakota.....	853,972	42			853,972	42
Tennessee.....	1,806,156	28			1,806,156	29
Texas.....	9,967,881	3			9,967,881	3
Utah.....	1,610,543	31			1,610,543	32
Vermont.....	597,809	45	36,193	6	634,002	44
Virginia.....	2,437,094	22	4,490	12	2,441,584	23
Washington.....	4,415,395	13			4,415,395	14
West Virginia.....	2,944,796	17	11,073	10	2,955,869	18
Wisconsin.....	6,184,777	7			6,184,777	8
Wyoming.....	570,204	46			570,204	46
Total, United States.....	\$158,492,101	.....	\$8,039,780	.....	\$166,531,881	.....

versity is the State College of Ceramic Engineering. Each of these professional schools in New York is under the more or less direct control of the state, and the appropriations are made on a regular budget basis.

In Pennsylvania relatively large grants are made to certain institutions in whose control the state does not participate. These grants, however, are made with the same type of budgetary control that applies to the regular enterprises of the state.

New Jersey has changed its policy since 1941. At that time state appropriations were made to Rutgers University, which was then a privately controlled institution. Since then Rutgers has become state controlled, so that now New Jersey no longer follows the policy of making state appropriations to privately controlled institutions.

Ohio really does not belong in the category of states that make public appropriations to private institutions. It is so classified because of the support given to Wilberforce University, which has both a state-controlled and a privately controlled unit. Ohio makes appropriations only for that part of Wilberforce University which is controlled through a State Board of Trustees.

With the exception of the four states whose programs have been discussed in the preceding paragraphs, there is no other state that provides anything like the amount appropriated by the State of Maryland for the support of privately controlled institutions of higher education. The policies followed by Maryland in this respect are more like those in Pennsylvania than in any other state, but even in this case the parallel is by no means exact. In general, therefore, it may be said that Maryland follows a unique policy in providing state support to privately controlled institutions of higher education.

Table 31 presents data, derived from the two preceding tables, showing the percentage of total educational and general income of the institutions of higher education in each state that is contributed by state funds. As in the preceding

TABLE 31

PERCENTAGE OF TOTAL EDUCATIONAL AND GENERAL INCOME OF INSTITUTIONS OF HIGHER EDUCATION IN EACH STATE THAT IS CONTRIBUTED BY STATE FUNDS, 1941-42

STATE	PUBLICLY CONTROLLED INSTITUTIONS		PRIVATELY CONTROLLED INSTITUTIONS		ALL INSTITUTIONS COMBINED	
	Percentage	Rank	Percentage	Rank	Percentage	Rank
Alabama	38.1	41	0.5	10	28.4	31
Arizona	56.5	13			56.5	3
Arkansas	55.0	14			46.5	12
California	54.1	17			34.4	26
Colorado	47.9	29			37.1	24
Connecticut	64.0	6			12.0	46
Delaware	43.4	35			41.1	18
District of Columbia						
Florida	69.6	1			51.1	8
Georgia	35.9	43			20.0	38
Idaho	57.3	11			51.2	7
Illinois	61.9	9			22.9	36
Indiana	53.9	18			37.3	23
Iowa	47.9	29			36.2	25
Kansas	48.2	28			39.9	22
Kentucky	45.5	32	0.1	11	30.9	29
Louisiana	69.3	2			49.7	10
Maine	51.5	24	0.1	11	29.6	30
Maryland	31.2	45	4.2	4	15.5	45
Massachusetts	66.7	4			6.5	48
Michigan	45.9	31			40.2	21
Minnesota	51.7	22			40.7	20
Mississippi	27.3	46	1.5	7	23.6	35
Missouri	56.7	12			27.2	32
Montana	49.3	26			43.9	14
Nebraska	49.5	25			42.4	15
Nevada	63.0	8			63.0	1
New Hampshire	41.0	38			17.1	42
New Jersey	54.7	15	18.5	1	24.4	34
New Mexico	51.7	22			51.7	6
New York	22.8	48	4.9	3	8.1	47
North Carolina	37.0	42			18.2	39
North Dakota	53.5	20			50.7	9
Ohio	43.8	34	3.0	5	24.7	33
Oklahoma	67.3	3			59.7	2
Oregon	59.6	10			47.6	11
Pennsylvania	40.6	39	7.7	2	16.7	44
Rhode Island	54.3	16	1.4	9	16.8	43
South Carolina	43.0	37	0.1	11	31.0	28
South Dakota	39.6	40			32.5	27
Tennessee	43.2	36			17.4	40
Texas	51.8	21			40.8	19
Utah	49.0	27			41.3	17
Vermont	34.0	44	2.9	6	21.2	37
Virginia	24.9	47	0.1	11	17.4	40
Washington	63.6	7			53.9	5
West Virginia	64.8	5	1.5	7	55.7	4
Wisconsin	53.7	19			42.3	16
Wyoming	44.6	33			44.6	13
Total, United States	47.9	.....	2.7	.....	26.6	....

tables the institutions are classified with respect to the nature of their control.

It will be observed from this tabulation that in only three states is a smaller percentage of the total income of all higher institutions provided from state sources than in Maryland; these states are Connecticut, Massachusetts, and New York. These states all have notably strong, nationally known universities of the privately controlled type. The contributions by the State of Maryland to the support of publicly controlled institutions are a smaller percentage of total educational and general income of such institutions than in any of the other states except three—New York, Virginia, and Mississippi. In quite the opposite direction, only Pennsylvania, New York, and New Jersey exceed Maryland in the percentage of total support of privately controlled institutions that is drawn from state appropriations. As previously noted, the situation has recently changed in New Jersey, so that at present probably only Pennsylvania and New York provide larger proportions of the support of privately controlled institutions from state sources than Maryland does.

Table 32 reduces the data of Tables 29 and 30 to per capita figures based on youth population. For convenience, the number of people in the state sixteen to twenty years of age is taken as a base in calculating the per capita figures, using the *U.S. Census, 1940*.

It is apparent from the data in this table that Maryland ranks relatively low in the amount provided from state sources for higher education in publicly controlled institutions when the amounts in each state are interpreted in terms of the size of the youth population. The states that rank lower than Maryland on per capita income for publicly controlled institutions from state sources are in general either the southern states, where general economic conditions are not as favorable as in Maryland, or the states having heavy concentrations of strong, privately controlled institutions. The actual amount provided from state sources to publicly controlled institutions in Maryland, per capita of youth population, is only 55 percent of the national average. Even when

TABLE 32

EDUCATIONAL AND GENERAL INCOME OF INSTITUTIONS OF HIGHER EDUCATION IN EACH STATE, AND INCOME FROM STATE SOURCES, PER CAPITA OF POPULATION AGE 16-20, FOR 1941-42

STATE	INCOME			CONTRIBUTIONS FROM STATE GOVERNMENT		
	Publicly Controlled Institutions	Privately Controlled Institutions	All Institutions	Publicly Controlled Institutions	Privately Controlled Institutions	All Institutions
Alabama.....	\$ 21.28	\$ 7.34	\$ 28.62	\$ 8.10	\$ 0.03	\$ 8.13
Arizona.....	48.46		48.46	27.35		27.35
Arkansas.....	19.46	3.55	23.01	10.71		10.71
California.....	53.35	30.44	83.79	28.85		28.85
Colorado.....	54.81	16.02	70.83	26.27	0.01	26.28
Connecticut.....	15.23	65.81	81.04	9.74		9.74
Delaware.....	35.10	1.93	37.03	15.22		15.22
District of Columbia...	7.31	118.03	125.34			
Florida.....	22.83	8.25	31.08	15.88		15.88
Georgia.....	14.23	11.21	25.44	5.09		5.09
Idaho.....	42.12	5.02	47.14	24.13		24.13
Illinois.....	22.43	38.18	60.61	13.88	0.02	13.90
Indiana.....	41.35	18.40	59.75	22.26		22.26
Iowa.....	47.97	15.43	63.40	22.97		22.97
Kansas.....	47.37	9.76	57.12	22.85		22.85
Kentucky.....	18.44	8.76	27.20	8.39	0.01	8.40
Louisiana.....	35.19	13.90	49.09	24.37		24.37
Maine.....	25.38	18.88	44.26	13.08	0.02	13.10
Maryland.....	22.92	32.02	54.94	7.15	1.35	8.50
Massachusetts.....	8.92	82.45	91.37	5.95		5.95
Michigan.....	47.90	6.83	54.73	22.00		22.00
Minnesota.....	45.81	12.44	58.25	23.69		23.69
Mississippi.....	19.34	3.25	22.59	5.28	0.05	5.33
Missouri.....	22.90	24.87	47.77	12.98		12.98
Montana.....	39.83	4.84	44.67	19.63		19.63
Nebraska.....	38.39	6.48	44.87	19.01		19.01
Nevada.....	117.06		117.06	73.70		73.70
New Hampshire.....	39.22	54.90	94.12	16.09		16.09
New Jersey.....	5.33	27.14	32.47	2.91	5.02	7.93
New Mexico.....	46.23		46.23	23.90		23.90
New York.....	11.65	54.78	66.43	2.66	2.70	5.36
North Carolina.....	16.97	17.61	34.58	6.28		6.28
North Dakota.....	39.17	2.19	41.36	20.96		20.96
Ohio.....	24.16	21.18	45.34	10.59	0.63	11.22
Oklahoma.....	31.22	3.92	35.14	21.00		21.00
Oregon.....	51.83	13.00	64.83	30.89		30.89
Pennsylvania.....	11.88	31.51	43.39	4.83	2.42	7.25
Rhode Island.....	15.78	38.55	54.33	8.57	0.55	9.12
South Carolina.....	18.47	7.15	25.62	7.93		7.93
South Dakota.....	33.83	7.37	41.20	13.39		13.39
Tennessee.....	14.25	21.19	35.44	6.16		6.16
Texas.....	30.63	8.23	38.86	15.86		15.86
Utah.....	57.31	10.69	68.00	28.11		28.11
Vermont.....	54.67	38.35	93.02	18.58	1.13	19.71
Virginia.....	34.94	15.11	50.05	8.70	0.02	8.72
Washington.....	46.56	8.36	54.92	29.61		29.61
West Virginia.....	22.76	3.78	26.53	14.73		14.73
Wisconsin.....	41.14	11.14	52.28	22.12		22.12
Wyoming.....	53.25		53.25	23.76		23.76
Total, United States.....	\$ 26.94	\$ 24.07	\$ 51.01	\$ 12.91	\$ 0.65	\$ 13.56

the state grants to private institutions are added into the total, Maryland provides from state sources only five-eighths as much per capita for higher education as the average for the country as a whole.

Maryland ranks high in the total support, per capita of youth population, for privately controlled institutions; only eight states exceed Maryland in this respect. But Maryland ranks thirtieth among the states in per capita support, from all sources, of its publicly controlled institutions.

Data contained in a study published in 1945 by the New York State Department of Education, entitled "The Financing of Higher Education in New York State,"³ throw some interesting lights on the trends over a period of years on Maryland's rank among the states with respect to income for higher education from various sources, per capita of youth population. The calculations in that study were on a different basis of youth population (the group aged eighteen to twenty-two years was used as a base) from that used in the preceding tables of the present report, but the ranking of the states is not affected appreciably by the difference in the age group used as a base. The basic data for the New York study were taken from original tabulations of the U.S. Office of Education.

The tabulations in the New York State bulletin show that Maryland provided for higher education from state sources about the same amount of money per capita of youth population in 1940 that it provided in 1933-34. During that same period most of the other states increased markedly their contributions of support to higher education from state sources. This resulted in loss of rank for Maryland in comparison with the other states; Maryland ranked twenty-ninth in 1933-34 and fell to thirty-sixth in 1939-40, with respect to per capita income for higher education from state sources.

The New York study also has a tabulation showing trends from 1919-20 to 1939-40 in the current support of higher education in each state from all public funds—federal, state,

³ *Bulletin of the University of the State of New York*, No. 1307 (Albany: University of the State of New York, 1945).

and local. During the two decades covered by the data, the per capita contributions for higher education from public funds in the country as a whole more than doubled. This was a period in which the junior college was growing rapidly and winning extensive support from public funds in many states. The state teachers colleges were strengthening their programs in almost every state, and the state universities were growing rapidly and were receiving increasingly generous appropriations. In Maryland, however, the trend was quite the opposite from that in the country as a whole. The contributions for the support of higher education from all public funds in Maryland did not keep pace with the increases in the state's population during the twenty years ending in 1940. Maryland ranked high among the states in the per capita support from all public sources in 1920—only four states exceeded Maryland in that year. But in 1939-40 Maryland had fallen to forty-second place among the states with respect to per capita support of higher education from all public funds.

The data that have been presented thus far relate to institutions as groups within states. It is important to look at the state university as an individual case, inasmuch as in Maryland this is the largest single institution of higher education.

Table 33 presents data showing the extent of the support of state university programs in each state from state funds. The tabulation also includes the territories and the District of Columbia. Only institutions that are identified as state universities are included in this tabulation, but the totals for each state also include the land-grant colleges for white students and any technological institutes of degree-granting level. Excluded are such institutions as state normal schools and teachers colleges, women's colleges, junior colleges, and municipal institutions. Grants of public funds to privately controlled institutions are also excluded from this table. The tabulation not only shows the total amount, but also the amount per student enrolled in the same institutions. The data are for 1939-40, the latest published figures that permitted calculations on the basis involved in this table.

TABLE 33

INCOME FROM STATE SOURCES FOR STATE UNIVERSITIES, 1939-40*
(Excludes Teachers Colleges, Junior Colleges, Municipal Institutions, Women's Colleges,
and Grants to Nonpublicly Controlled Institutions)

UNIVERSITIES, STATE, OR TERRITORIAL	INCOME FROM STATE GOVERNMENT		INCOME PER STUDENT FROM STATE GOVERNMENT	
	Amount	Rank	Amount	Rank
California.....	\$8,451,534	1	\$285.37	19
Michigan.....	7,538,043	2	357.88	7
Ohio.....	6,281,458	3	203.65	32
Texas.....	6,051,510	4	244.38	26
Illinois.....	5,454,711	5	377.27	6
Louisiana.....	5,252,498	6	380.42	5
Indiana.....	4,709,797	7	327.77	10
Iowa.....	4,566,015	8	324.06	12
Minnesota.....	4,558,929	9	260.12	22
Wisconsin.....	3,033,777	10	304.11	15
Washington.....	3,028,920	11	183.87	37
Oklahoma.....	2,652,359	12	198.20	34
Kansas.....	2,480,250	13	269.20	21
Missouri.....	2,407,353	14	349.85	9
Pennsylvania.....	2,267,317	15	310.90	13
Oregon.....	1,853,305	16	206.54	31
Colorado.....	1,797,525	17	244.16	27
Nebraska.....	1,742,892	18	242.90	28
West Virginia.....	1,737,853	19	307.42	14
Florida.....	1,703,937	20	493.03	3
Puerto Rico.....	1,164,738	21	254.96	24
Virginia.....	1,623,790	22	154.08	44
Alabama.....	1,510,537	23	161.90	43
North Carolina.....	1,493,802	24	223.52	29
Massachusetts.....	1,264,579	25	733.88	1
Kentucky.....	1,233,943	26	326.70	11
Utah.....	1,106,236	27	140.71	47
South Carolina.....	1,061,824	28	192.15	36
Tennessee.....	1,027,071	29	170.92	39
Idaho.....	976,214	30	196.03	35
Connecticut.....	887,553	31	701.62	2
Arizona.....	838,722	32	288.62	18
Maryland.....	838,244	33	166.09	41
Arkansas.....	771,369	34	300.38	16
New Mexico.....	755,391	35	199.69	33
Maine.....	725,076	36	355.76	8
Montana.....	646,187	37	149.44	46
North Dakota.....	642,582	38	166.43	40
South Dakota.....	584,494	39	214.65	30
Mississippi.....	577,598	40	151.64	45
Georgia.....	573,462	41	90.05	49
New Hampshire.....	523,966	42	258.62	23
Hawaii.....	445,614	43	164.85	42
Wyoming.....	414,844	44	183.24	38
Rhode Island.....	343,181	45	274.47	20
Nevada.....	318,710	46	252.14	25
Delaware.....	280,323	47	296.32	17
Vermont.....	206,373	48	138.80	48
Alaska.....	122,950	49	458.77	4
New Jersey.....	85,000	50	42.59	50
New York.....	.....	51	.....	.....
District of Columbia.....	.....	52	.....	.....

* Data for the individual institutions were supplied by U.S. Office of Education.

On the basis of the total amount of state funds provided for the operation of its state university, Maryland ranked thirty-third among the states in 1939-40. On the basis of the amount of funds from state sources per student enrolled, Maryland ranked forty-first among the states and territories.

Certain financial data are available for the land-grant colleges for Negroes in the states having separate institutions for the races. These data are summarized in Table 34.

TABLE 34
FINANCIAL DATA FOR NEGRO LAND-GRANT COLLEGES*

STATE	NEGRO POPULATION, 1940	1941-42 NEGRO LAND- GRANT COLLEGES ENROLL- MENT	1941-42 EDUCATION AND GENERAL INCOME		1941-42 EXPENDI- TURES FOR EDUCATION AND GENERAL PURPOSES	1939-40 TOTAL VALUE OF PROPERTY
			From State	Total		
Missouri	244,386	769	\$479,100	\$515,209	\$356,519	\$1,094,000
Louisiana	849,303	903	384,520	445,685	280,550	1,196,550
Virginia	661,449	1,302	148,341	368,782	372,667	2,486,687
West Virginia	117,754	978	215,044	325,433	272,733	1,687,189
Texas	924,391	1,217	173,750	325,340	339,202	1,932,896
Florida	514,198	907	207,897	321,500	299,195	1,479,052
Tennessee	508,730	1,242	110,000	242,999	148,452	2,821,000
Oklahoma	168,849	681	186,748	222,771	219,975	1,154,485
South Carolina	814,164	977	82,500	213,911	188,720	1,434,000
North Carolina	981,298	1,020	86,238	190,308	192,309	1,650,193
Arkansas	482,578	446	115,558	180,701	158,810	843,338
Georgia	1,084,927	585	92,695	173,212	173,179	865,364
Mississippi	1,074,578	463	50,253	154,800	171,723	1,037,328
Kentucky	214,031	520	110,000	141,217	108,307	1,327,501
Alabama	983,290	647	30,000	103,002	91,463	944,797
Delaware	35,876	135	54,530	81,776	76,942	541,015
Maryland	301,931	124	28,623	56,786	52,784	346,210

* *Statistics of Land-Grant Colleges and Universities* (Washington: Government Printing Office).

The tabulation reveals the pathetically meager development which has occurred at the land-grant college for Negroes in Maryland. As compared with other states, Maryland has fallen far short in developing an institution supported on a reasonable basis to attract a student enrollment of substantial size. The State of Missouri has 20 percent fewer Negroes in its population than Maryland has, yet it maintains a land-grant college for Negroes that enrolled in 1941-42 more than six times as many students as Princess Anne College in Maryland, and the supporting income for its educational program

was more than nine times the amount the Maryland land-grant college had in the same year. There are five states in the group that have smaller Negro populations than Maryland has, but every one of these states had a larger enrollment in its Negro land-grant college than Princess Anne College had, and each of the five also had a larger income for its land-grant college than Maryland had.

It is difficult to understand why Maryland has neglected so disgracefully its land-grant college for Negroes. A partial explanation lies in the fact that Maryland has scattered its resources for Negro higher education among several institutions instead of concentrating them in a single center where a strong program could be developed. Missouri, Kentucky, Florida, and West Virginia are examples of states that have followed the policy of maintaining only a single institution for Negroes.

The analysis of the data that have been presented thus far in this chapter all point to one general conclusion—Maryland has not been supporting higher education from public funds as generously as most of the other states. It will be recalled that in chapter i data were presented showing that Maryland is in a more fortunate economic position than most of the other states with respect to ability to support a strong educational program. It is surprising, therefore, to find that provisions of public funds for the support of higher education have been relatively less extensive in Maryland than in most other states. The inescapable conclusion is that Maryland could well afford to put more public funds into the support of facilities for higher education for its young people.

INCOME AND EXPENDITURES IN THE VARIOUS MARYLAND INSTITUTIONS

Detailed information regarding income and expenditures of the state-supported institutions of higher education in Maryland proved to be surprisingly difficult to obtain in a form useful for this survey. The chief difficulty arose from the nature of the accounting system used in the various institutions. The plans of financial accounting in all of the

state-supported institutions, with the exception of the University of Maryland, fail to classify expenditures in accordance with the categories that are generally recognized as standard for institutions of higher education. Because of the prescription of the manner in which budget requests must be presented to the state and because of the necessity of following the system of financial control established by the state through the budget director's office and the Board of Public Works, the institutions of higher education have set up in their financial-accounting systems a plan of classifying income and expenditures that fails to yield the information that is of greatest significance for educational and financial interpretations.

The most glaring defect in the classification plan for income and expenditures in the state-controlled institutions of higher education is the failure to separate items connected with educational operations from those pertaining to auxiliary activities such as dormitories and dining halls. It should be obvious that financial data cannot be compared among institutions unless such a separation is made, especially when the numbers of students who are provided with board and housing facilities vary as widely as they do in the Maryland institutions. It is thus also impossible to analyze the results of enterprises, such as dining halls, that are supposed to be operated on a self-supporting basis.

It is not necessary in this survey to go into detail with respect to all the points at which the accounting systems in use in the Maryland institutions deviate from the standard plan. The state and institutional officials are referred to the authoritative publications on this subject, such as the book by the National Committee on Standard Reports for Institutions of Higher Education entitled *Financial Reports for Colleges and Universities* (University of Chicago Press, 1935). Another authoritative guide, published under the auspices of the Financial Advisory Service of the American Council on Education, with Edward D. Miles as the author, is entitled *Manual of Teachers College Accounting*. Copies of these books were observed on the library shelves of some

of the Maryland institutions, but apparently neither the business officers of the institutions nor the responsible state officials are familiar with these authoritative works, for the financial-accounting systems do not follow the standards therein recommended. A great service could be rendered at very little expense if the state could assist in installing in each local business office a standard set of financial records set up in accordance with the recommendations of the National Committee on Standard Reports. Institutional budgets should be submitted in accordance with these standard classifications, and the budget controls and all fiscal reports should be cast in the same set of classifications.

It must be noted that the business office of the University of Maryland is an outstanding exception to the generally unsatisfactory nature of the financial-accounting systems in the Maryland state-supported institutions. At the University of Maryland the accounts are kept in the classifications required by the state, but the institution also keeps financial accounts, at the cost of some extra time and effort, in another classification which conforms closely to standard practice. The authorities of the University of Maryland should be commended for their diligence in maintaining records according to the standard classifications of accounts, even though this has meant some loss of efficiency because of the duplication involved in keeping also the kind of records required by the state financial officers.

The lack of adequate financial records in all the institutions except the University of Maryland has meant that the kinds of reports needed for the purposes of this survey, or for any intelligent analysis of the income and expenditures of these institutions, could be obtained only through a series of approximations. It was not possible in most of the institutions, for example, to get a precise figure for the amount expended for library books because the accounts do not yield readily this important item of data, expenditures for library books being thrown into a single category along with other items of supplies and equipment. Institutional officials, it may be noted, have difficulty equal to that encountered in

filling out data forms for this survey every time they prepare financial reports for any of the recognized agencies, such as the U.S. Office of Education, which regularly ask for financial information in accordance with the standard categories.

In general, the privately controlled institutions that receive support from state funds have reasonably good systems of financial accounting. The system at Western Maryland College is very good and conforms closely to the recognized standards. The authorities at Johns Hopkins University were reluctant to provide financial data for the purposes of the survey because of the difficulty of interpreting the information for that institution in terms of numbers of students served. For this reason Johns Hopkins University is omitted from the tables of data presented in this section of the chapter.

The foregoing limitations must be kept in mind in considering the data presented in the following series of tables, which deal with income and expenditures for 1945-46. One other limitation which must be borne in mind is that 1945-46 was not a normal year for college enrollments. In the tabulations that present income and expenditure for full-time students it must be remembered that the base used as a divisor—number of students—is smaller than normal in most of the institutions, and that the absolute figures are therefore larger than they would normally be. In the institutions that have had marked increases in enrollments in the autumn of 1946, the figures for income and expenditure per student will be radically different in 1946-47 from those for 1945-46.

Table 35 shows the total income for educational and general purposes for 1945-46 in the institutions that received state support in Maryland in that year. The figures for the University of Maryland relate only to the units at College Park. Frostburg State Teachers College was unable to supply the financial data that were requested. The enrollment of students at each institution is shown in terms of the "full-time equivalent." This figure for number of students is obtained by calculating the carrying-load in such a way that the enrollment figures represent the equivalent number of stu-

TABLE 35

TOTAL INCOME AND INCOME PER FULL-TIME STUDENT FOR EDUCATIONAL AND GENERAL PURPOSES
IN STATE-SUPPORTED INSTITUTIONS IN MARYLAND, 1945-46

INSTITUTION	1945-46 Enroll- ment	Total Income 1945-46	AMOUNT PER STUDENT						Total Income Per Student
			Student Fees	Endowment Earnings	Federal Government	State Government	Private Gifts and Grants	Miscella- neous Income	
Bowie State Teachers College.....	132	\$ 109,898	\$129.21	.....	.....	\$651.13	\$ 37.88	\$14.12	\$ 832.34
Frostburg State Teachers College.....	130	.....	.....	.....	.....	.....	.....	.....	.....
Salisbury State Teachers College.....	163	120,931	164.12	.....	.....	577.79	.....	.....	741.91
Towson State Teachers College.....	264	211,184	7.26	.....	.....	792.68	.....	.....	799.94
Morgan State College.....	1,016	309,251	131.90	.....	.....	157.47	.17	14.87	304.41
St. Mary's Female Seminary.....	89	29,339	137.49	.....	.....	190.32	.....	.....	327.81
University of Maryland*.....	3,129	1,463,396	206.38	\$ 1.06	\$ 51.23	195.43	2.49	11.10	467.69
Princess Anne College.....	115	61,162	66.80	.....	131.83	311.98	20.63	.59	531.84
St. John's College.....	140	201,498	513.99	.....	.....	450.00	438.44	36.84	1,439.27
Washington College.....	343	130,245	191.70	5.83	.....	174.93	.....	7.26	379.72
Western Maryland College.....	583	263,687	287.27	51.46	.....	96.91	12.69	3.96	452.29

* College Park enrollment.

dents enrolled for a full-time program for the academic year of nine months. The table further computes the total income for educational and general purposes per full-time student. The amount of income per student from each of the major sources is also shown in the table. The total educational and general income, as has been previously explained, omits amounts received from fees for dormitory rooms or dining hall or other income not strictly related to the current educational program of the institutions.

Table 36 shows the same data converted into a percentage distribution. The financial data have been compiled from reports submitted by the institutions, and no attempt has been made in this survey to reconcile the figures to any official audits or other possible sources of reference.

TABLE 36
PERCENTAGE DISTRIBUTION OF INCOME FOR EDUCATIONAL AND
GENERAL PURPOSES, BY SOURCE, 1945-46

Institution	Student Fees	Endowment Earnings	Federal Government	State Government	Private Gifts	Miscellaneous
Bowie State Teachers College.....	15.5	.....	.....	78.2	4.6	1.7
Frostburg State Teachers College.....	.....	.....	.....	.....	.....	.....
Salisbury State Teachers College.....	21.4	.....	.....	78.6	.....	.....
Towson State Teachers College.....	0.9	.....	.....	99.1	.....	.....
Morgan State College.....	43.3	.....	.....	51.7	*	4.9
St. Mary's Female Seminary.....	41.9	.....	.....	58.1	.....	.....
University of Maryland (College Park only).....	48.4	0.7	7.5	36.9	1.3	5.2
Princess Anne College.....	12.6	.....	24.8	58.7	.....	3.9
St. John's College.....	35.7	.....	.....	31.3	30.5	2.5
Washington College.....	50.5	1.5	.....	46.1	.....	1.9
Western Maryland College.....	63.5	11.4	.....	21.4	2.8	0.9

*Less than one-half of one percent.

It will be noted that the institutions vary widely with respect to the total income for educational and general purposes per full-time student. At Morgan State College the amount is only \$304.41, while at Bowie State Teachers College it is \$832.34, and at St. John's College it is \$1,439.27. The reader will readily note that in general the institutions with small enrollments, particularly those with fewer than 300 students, all have relatively high incomes per student, where-

as the larger institutions, such as Morgan College and the University of Maryland, have much smaller amounts of income per student. It is clear that the State of Maryland pays a very high premium for the kind of education maintained in its relatively small state teachers colleges as compared with the amount of income required in the larger institutions, such as Morgan College and University of Maryland. In other words certain of the state institutions are obviously operating far below the point of maximum efficiency, where a dollar's income will provide a dollar's worth of education.

A special word should be said about St. Mary's Female Seminary. The enrollment in this institution includes the upper two years of high school and the first two years of college only. At first glance its expenditure per student seems low in comparison with the other institutions, but as a matter of fact the income per student at St. Mary's is inordinately high as compared with the typical cost for junior colleges throughout the country. Furthermore, St. Mary's was operating in 1945-46 at its maximum enrollment, and there can be no reduction in the income per student through the process of increased enrollment, as has happened in almost all the other institutions in the autumn of 1946.

Table 36, which shows the percentage distribution of income, indicates a remarkable variation in the extent of dependence upon income from the state. In general the state teachers colleges have the great bulk of their income from state sources, but the University of Maryland obtains only a little more than one-third of its income from the state. One of the three privately controlled institutions receiving state support obtains a considerably higher percentage of its total income from the state than the University of Maryland does. The variations among the state-controlled institutions in the degree of dependence on student fees warrant general consideration by state authorities in the determination of educational policies.

Table 37 presents data showing expenditures for educational purposes in the state-supported institutions in Maryland in 1945-46. These expenditures are classified into the

four standard functions—administration and general, resident instruction, library, and plant operation and maintenance. Omitted from the totals are the amounts for extension services and for separately organized research. Noneducational expenditures and capital outlays are also excluded.

TABLE 37
TOTAL EDUCATIONAL EXPENDITURES AND EDUCATIONAL EXPENDITURES*
PER FULL-TIME STUDENT, 1945-46

INSTITUTION	EN-ROLLMENT	TOTAL EDUCATIONAL EXPENDITURES	AMOUNT PER STUDENT				TOTAL
			Adminis- tration and General	Resident Instruc- tion	Library	Plant Op- eration and Main- tenance	
Bowie State Teachers College.....	132	\$ 96,558	\$ 174.86	\$ 219.40	\$ 29.75	\$ 307.49	\$ 731.50
Frostburg State Teachers College.....	130	.....	.....	.....	.....	.....	.....
Salisbury State Teachers College.....	163	107,302	93.87	315.42	59.62	189.39	658.30
Towson State Teachers College.....	264	192,212	88.37	415.76	41.24	182.69	728.08
Morgan State College...	1,016	200,318	54.35	112.08	15.33	15.42	197.18
St. Mary's Female Seminary.....	89	36,554	67.59	183.47	13.88	143.49	408.43
University of Maryland†	3,129	1,357,302	72.34	255.00	17.09	89.35	433.78
Princess Anne College...	115	60,544	103.26	271.31	12.98	138.91	526.47
St. John's College.....	140	152,155	292.32	434.54	45.61	314.34	1,086.82
Washington College.....	343	96,167	71.94	143.69	18.39	46.36	280.37
Western Maryland College.....	583	235,495	82.87	262.69	16.55	41.83	403.94

* Expenditures for extension services and separately organized research are excluded from this tabulation.

† College Park units only.

The data of the tables show the total expenditures and the amount per full-time student. Table 38 shows the expenditures for each of the four functions as percentages of the total expenditures for educational purposes.

It is not possible to compare directly the income of institutions as shown in Table 35 with expenditures shown in Table 37. The latter table includes only expenditures for certain definite educational functions. The income reported in the preceding table, though for general and educational purposes, may not have been used in that way; and other kinds of income may in some cases have been drawn upon to support the educational program.

In general, the same sort of variation exists among the institutions with reference to expenditures, as was shown in the preceding table for income. In terms of the amounts expended in relation to numbers of students served, the state teachers colleges are relatively expensive institutions.

TABLE 38

PERCENTAGE DISTRIBUTION OF EDUCATIONAL EXPENDITURES, 1945-46

Institution	General Administration	Resident Instruction	Libraries	Plant Operation and Maintenance
Bowie State Teachers College.....	23.9	29.9	4.1	41.7
Frostburg State Teachers College.....				
Salisbury State Teachers College.....	14.3	47.9	9.1	28.8
Towson State Teachers College.....	12.1	57.1	5.7	25.1
Morgan State College.....	27.6	56.8	7.8	7.8
St. Mary's Female Seminary.....	16.6	44.9	3.4	35.1
University of Maryland (College Park only) .	12.2	66.7	3.0	18.1
Princess Anne College.....	19.6	51.5	2.5	26.4
St. John's College.....	26.9	40.0	4.2	28.9
Washington College.....	25.7	51.2	6.6	16.5
Western Maryland College.....	20.5	65.0	4.1	10.4

A high figure for expenditure per student may often be interpreted as an indication of a high quality of program; obviously if the greater expenditures permit the employment of professors at better salaries and with higher competence, the quality of the program will be improved. It will be recalled, however, that none of the state teachers colleges has accreditation that compares favorably with the regional recognition held by Morgan State College, Washington College, and Western Maryland College, or with the national accreditation of the University of Maryland, yet the expenditures per student in each of these well-accredited institutions are much smaller than in the state teachers colleges.

It is difficult to escape the conclusion that the State of Maryland is not getting full value for the money it is putting into the support of its state teachers colleges. This condition is not due to any fault of the administration of the institutions or to any shortcomings of the faculty. The difficulty arises solely because it has been the policy of the state to maintain several small institutions for purposes of teacher preparation. These units have such limited enrollments that

they cannot be operated efficiently. Even with the increases in enrollments that have occurred in the autumn of 1946, at least three of the four state teachers colleges will continue to have inordinately high expenditures per student because of their small enrollments.

Interpretations of the data with respect to distribution of expenditures among the four functions shown in Tables 37 and 38 are clouded by the inaccuracies in the classifications of expenditure items. It is only at the University of Maryland that one can have much confidence in the figures given for expenditures for each of the four functions. The picture at the University of Maryland is that of a well-managed institution. The percentage of the total that is devoted to administrative purposes at the University of Maryland is below the general average for all institutions reporting to the U.S. Office of Education. Plant operation and maintenance at the University of Maryland represents a little larger than the average percentage of the total expenditure, but this is probably attributable to the nature of the physical plant. The percentage for resident instruction is almost exactly at the national average. The chief indication from Table 38 with respect to deviations from the national averages in percentage distribution of educational expenditures is that the library at the University of Maryland is not as well supported as in other institutions throughout the country.

The goal for an effective administration is to put as large as possible a percentage of the total income into the function of resident instruction. This is the function for which the institution and all its other services exist. Not one of the other state-supported institutions in Maryland equals the percentage of total expenditures put into resident instruction by the University of Maryland. Because of the relatively large enrollments at the University, this institution has a great advantage in its allocation of expenditures. It is usually difficult to put more than 60 percent of the total expenditures into the actual instructional program of a small college because administration, plant operation and maintenance, and library services have certain minimal requirements which

must be maintained regardless of the size of the institution. This situation merely emphasizes the inefficiency inherent in a small institution, to which attention has already been called.

It is appropriate to make comparisons from the preceding tables between the support of institutions for white students and those for Negroes in Maryland. In making such an analysis, care must be taken to compare only institutions that are somewhat alike in size and in scope of program. It will be noted, for example, that the College Park division of the University of Maryland spends more than twice as much per student as Morgan State College. While the University of Maryland has certain graduate and professional programs that are not provided at Morgan College and that are inherently expensive, the comparison is otherwise appropriate. The conclusion is not that the University of Maryland spends too much, but rather that too little is provided for Morgan State College.

Comparisons between Princess Anne College and any other institution are not appropriate because none of the degree-granting colleges has as small an enrollment. Although Princess Anne College spends more per student than the University of Maryland spends, it would need to spend three or four times as much as it now does in order to have anything like a comparable program for its small enrollment.

The State Teachers College at Bowie seems to be supported on much the same basis as the state teachers colleges for white students. Here is the one bright spot in the picture of the state's provision of education for Negroes on a basis comparable to the provision for white students.

BUDGETARY PROCEDURE

The general budgetary procedure as prescribed in the state has been described in an earlier connection. This type of budgetary procedure is necessary in submitting estimates for legislative appropriations and in maintaining such controls at the state level as are involved in limiting institutional expenditures to the amounts and categories prescribed in the

appropriation acts. Beyond these essential features of state budgetary control, good financial management requires an effective system of budgetary procedure for the internal operations for an institution of higher education. The essential features of budgetary procedure have been described by John Dale Russell in his book *The Finance of Higher Education* (University of Chicago Bookstore, 1944) and need not be discussed at length in this report.

The internal budgetary procedure in a well-managed college or university serves an important function in general administrative control and is a necessary adjunct to effective management. The internal operating budget must, of course, be related to the original budget requests as reviewed by the state officials and the legislature before the appropriation act is passed. The operating budget must also be keyed to the control budget set up by the state officials for the purposes of safeguarding the state's responsibility with respect to the appropriations actually made by the state legislature. The operating budget, however, goes farther than the legislative appropriation act or the preliminary budget requests in outlining for the controlling board of the institution and its responsible executive officials the various projects and activities currently carried on through the institutional program. The budget may be said to constitute a picture of the activities of the institution, reduced to financial terms.

It is only through an effective budgetary procedure that the board responsible for the general control of the institution can most wisely make decisions with respect to operating policies. One of the vital concerns of the board responsible for the control of an educational institution should be the status of the operating budget. Through a properly organized budget the members of the board can see clearly what is going on in the institution and can judge the wisdom of the policies that are involved. The balance between estimated and realized income and expenditure, as reflected in frequent budget reports, should also be a matter of vital concern to the members of the board responsible for the control of the institution.

With the exception of the University of Maryland, the state-controlled institutions in Maryland do not have an operating budget at all in the usual sense of the term. The categories set up by the legislative appropriations are the only bases for classification of expenditures and income, and the only attempt at internal budgetary control is a routine check on expenditures to keep them within the limits of the appropriations or to request from the state budget officer a budget amendment if some deviation from the detailed appropriation seems necessary. None of the state-controlled institutions in Maryland except the University of Maryland has an operating budget which definitely allocates expenditures to subordinate units within the institution or which holds the executive officers of such units responsible for the control of expenditures. For example, the library is an important administrative unit within each institution, but in no case (except the University of Maryland) is the librarian informed of a specific amount which the institution will plan to spend for the purchase of library books. Persons within the staff of the institution who are responsible for originating requests for expenditures do not receive regular reports with respect to amounts expended to date during the fiscal year and the balances remaining available for expenditure.

In some of the institutions it is taken for granted that the small size makes the procedure of internal budgetary control unnecessary. In such cases it seems that the president keeps in his head some general ideas regarding the way the various parts of the institution are expending funds, but no detailed record is kept and the responsible heads of these units are kept in the dark as to the amounts which they are to be allowed to spend during the fiscal year.

As previously noted, good management requires an effective system of internal budgetary procedure. This is now provided at none of the state-controlled institutions except the University of Maryland. A source from which information about an effective plan of budgetary procedure may be obtained has already been cited.

Again it must be emphasized that the University of Maryland is not included in the general statement regarding the deficiencies in internal budgetary procedure. The budget at the University of Maryland is prepared in great detail. It is set up in standard classification and gives an effective picture of the operations of the institution. This budget is filed with the members of the State Board of Public Works and with the appropriate executive officers in the University. The one point on which the budgetary procedure of this University might be criticized adversely relates to the fact that the detailed operating budget does not receive sufficient attention by the Board of Regents, either when first formulated subsequent to the passage of the appropriation account, or as revisions become necessary during the operations of the fiscal year.

AUDITING AND REPORTING

A primary requisite of good financial management is a thorough audit each fiscal year. For the most part, the Maryland institutions are not regularly audited. This is a service which the state should provide, both as an assistance to its institutions and also as an important type of safeguard over the use of public funds. To be most helpful, the audit of an educational institution should be made shortly after the close of the fiscal year. While the business office of the institution should not depend on the audit for the closing of the books or the making of the annual financial report, the data supplied through the audit should substantiate the figures derived by the accounting officer. If discrepancies are found, they should be corrected immediately after the audit is completed.

None of the Maryland institutions of higher education at present publishes a satisfactory annual financial report. This is a service which each institution owes to its constituency. The University of Maryland formerly published an excellent annual financial report, but this was discontinued in 1942 as an economy measure at the suggestion of the State Budget Office. At present the University of Maryland publishes only

a one-page summary of its financial operations, with the categories set up in accordance with those specified in the legislative appropriations. This summary naturally reveals little or nothing of the operations of the institution. None of the other state-controlled institutions publishes any type of financial report.

The requirements of an effective system of financial reporting are well understood, and competent advice can be obtained from several published reference sources. This survey does not need to outline a financial reporting system in detail. The responsible institutional officials may well refer to such references as John Dale Russell's book on *Finance of Higher Education* or *Standard Financial Reports for Colleges and Universities* by the National Committee on Uniform Reports.

THE STATE SCHOLARSHIPS AND GRANTS TO PRIVATELY CONTROLLED INSTITUTIONS

The State of Maryland maintains an extensive system of scholarship awards to provide for the education of some of its citizens at certain designated institutions. The legislature makes appropriations to five privately controlled institutions with the stipulation in each case that a certain number of scholarships shall be granted. The scholarships at each of these institutions cover tuition fees, and certain of the scholarships at some of the institutions cover board or other living costs or books. Provisions are also made for scholarships at three publicly controlled institutions—the University of Maryland, Princess Anne College, and St. Mary's Female Seminary. No appropriation is made to cover the cost of these scholarships, however; the state-controlled institutions are expected to provide the scholarships out of the general appropriations that they receive from the legislature.

History of Grants to Private Institutions in Maryland

The granting of state funds to private institutions of higher education in the State of Maryland dates back to the latter part of the eighteenth century. By an act of 1784 two col-

leges, Washington and St. John's, received funds from the State of Maryland to help establish and operate the institutions. In 1785 the Visitors and Governors of St. John's College were asked to select five boys from the counties, to be "clothed, boarded, and educated gratis." This was the first evidence of a program that was to develop and grow until today five privately controlled institutions of higher education receive funds from the State of Maryland, in return for which a number of scholarships are awarded by these institutions.

The granting of state funds to private institutions was not followed as a consistent policy, and not until relatively recent years has it provided these privately controlled colleges with a steady source of income. At various times during the nineteenth century state funds were cut off from the private colleges, only to be reinstated at a later date.

Following the award of scholarships at St. John's College in 1785 were those at Washington College in 1827, St. Mary's Female Seminary in 1868, Western Maryland College in 1878, and at Johns Hopkins University in 1898. All these institutions were privately controlled at these dates.

Number and Kinds of State Scholarships Awarded at Present

The basis for the award of state scholarships at the Johns Hopkins University is found in Chapter 90 of the Acts of 1912. It stipulates that 129 scholarships are to be awarded; 102 of these are distributed at the rate of 1 for each member of the House of Delegates, 6 are from the state at large, and 21 are from the graduates of certain other colleges in the State of Maryland. Later when the Fifth and Sixth districts of Baltimore City were added, the number of scholarships was increased to 141. These scholarships provide for free tuition, remission of all other fees, and free use of textbooks. In addition, funds are provided to 29 of the 141 scholarship-holders for living expenses at the rate of \$200 per annum. Normally, approximately 35 new scholarship students are appointed each year; in addition new appointments must be made to replace drop-outs.

Chapter 11 of the Acts of 1908 stipulates that 58 scholarships are to be awarded by St. John's College. Twenty-nine of these (1 for each legislative district) are for tuition, board, and room, and 29 are for tuition alone. With an equal distribution of scholarship-holders in the four classes and with replacements for drop-outs disregarded, there should be 17 new scholarships awarded each year at St. John's College.

Chapter 309 of the Acts of 1909 states that 111 scholarships are to be awarded at Washington College. Fifty of these are for tuition only, 25 are for tuition and textbooks, and 36 are for tuition, board, room, and textbooks. It is extremely difficult to determine the distribution of the scholarship-holders at Washington College. A number of legislative acts cover the awarding of the scholarships, but it is practically impossible to arrive at a total for the College. Approximately 28 scholarships should be awarded each year if an even distribution is maintained throughout the four college years and if replacements for drop-outs are disregarded.

A total of 86 scholarships are provided at Western Maryland College. Fifty-eight of these (2 from each legislative district) provide tuition and board; 28 scholarships (2 from each election district in Carroll County) provide only tuition. Approximately 22 scholarships should be awarded each year provided there is even distribution in all classes and if replacements for drop-outs are disregarded.

The Maryland Institute for the Promotion of the Mechanic Arts and the School of Fine and Practical Arts is supposed to award 116 scholarships which are for tuition only. This makes it possible to award 29 new scholarships each year if there is even distribution among classes and if replacements for drop-outs are disregarded. (Throughout other parts of this survey, Maryland Institute is not considered as an institution of higher education; it is included in the present discussion because of the large number of scholarships maintained there at state expense.)

Basis of Scholarship Awards

With the exception of Caroline, Montgomery, and Prince George's Counties, the scholarship holders are appointed by the state senator following a competitive examination. There is supposed to be proof that the candidate could not attend college without financial assistance. In each of the three counties mentioned above the Board of Education certifies the candidates to the senators.

The general plan for the selection of scholarship-holders involves the giving of an examination to high school seniors shortly before their graduation. The examination is administered centrally from the State Department of Education. It is taken only by those high school seniors who wish to apply for a scholarship, and each applicant designates the institution which he wishes to attend. The officials of the State Department of Education should be warmly commended for having taken the leadership in setting up the examination for scholarship purposes.

When the applicants have taken the examination, the papers are sent for grading to the institutions which they wish to attend. The institution assigns someone who marks the papers and who indicates all who pass. The applicants in most cases are also ranked with respect to their standing on the examination. The list of candidates in each senatorial district is then referred to the state senator who has authority to designate any candidate as the recipient of any scholarship in which there is a vacancy. The senator is supposed to designate only from the list of those who have been marked as passing the examination. Some evidence was found that a senator has upon occasion designated as a scholarship-holder one who did not pass the examination and who was not even qualified for entrance to the institution concerned. Other instances were reported where the senator designated as a scholarship-holder someone who did not even take the examination. For the most part, however, the senators choose the scholarship-holders from the top of the ranking list of those passing the examination. Presumably there is an attempt to designate as scholarship-holders only those students

who would be unable financially to attend college without the grant.

Holders of scholarships at St. John's College, Washington College (women only), and Western Maryland College are supposed to teach for two years in the schools of the State of Maryland. Women scholarship-holders at Washington College are expected to sign a bond to reimburse the College at the rate of \$25 each session they hold a scholarship if they fail to teach for two years. At Western Maryland College state scholarship-holders give bond which is set by the president of the College. Under its present instructional program, St. John's College cannot qualify its students to teach in the public schools of Maryland. The "pledge to teach" at that institution is, therefore, decidedly anomalous.

Amount of Provision for Scholarships

Table 39 shows the amount received from the state by each privately controlled institution and the number of scholarships to be provided. The table also shows the number of state scholarships provided in the three state-controlled institutions which receive senatorial appointees as scholarship-holders. For the purpose of reference this table also shows the stated amounts of tuition and other fees at the institutions receiving scholarship students.

Table 40 continues the calculations by showing, in some detail, the costs to the state and to the institutions. The first set of columns in that table shows what the cost of providing the scholarships would have been to the institution if all scholarships had been awarded at the stated rates of fees. The next column shows the difference between the stated value of the scholarships and the state appropriation, or the amount of "free" money supposed to be provided the institutions by the state appropriation. Another set of columns shows the actual number of scholarships awarded in 1945-46 and the cost to the institution at its regular rates. The next column shows the difference between the amount actually awarded as scholarships and the state appropriation, or the true amount of the "free" money provided to the institutions

TABLE 39

STATE APPROPRIATIONS TO PRIVATELY CONTROLLED INSTITUTIONS, NUMBER OF STATE SCHOLARSHIPS,
AND INSTITUTIONAL FEES AND CHARGES, 1945-46

INSTITUTION	TOTAL AMOUNT RECEIVED FROM STATE 1945-46	NUMBER AND KINDS OF SCHOLARSHIPS EACH INSTITUTION WAS SUPPOSED TO AWARD 1945-46						INSTITUTIONAL FEES AND CHARGES 1945-46		
		Tuition	Tuition and Texts	Board and Tuition	Tuition, Board, Room, Texts	\$200 for Living Costs	Tuition	Board and Room	Texts	
Privately Controlled Institutions:										
Johns Hopkins University	\$127,196	.....	141	.....	29 (No texts)	29*	\$450	.....	\$15	
St. John's College	63,000	29	.....	.....	36	.....	600	\$ 400	.....
Washington College	60,000	50	25	.....	.....	.....	190	370	50	
Western Maryland College	56,500	28	.....	58	.....	.....	300	400-475	45	
Maryland Institute	16,500	116	.....	.....	.....	.....	170†	.....	.....
							20‡	.....	.....
Total	\$323,196	223	166	58	65	29				
Publicly Controlled Institutions:										
University of Maryland	No specified amount	210	.....	.....	.....	.....	145	420-430	43 plus	
Princess Anne College	"	29	.....	.....	.....	.....	110	265	33 plus	
St. Mary's Female Seminary	"	.....	.....	29 (and room)	.....	.....	120	350	.....
Total		239	.....	29	.....	.....		
Grand Total		462	166	87	65	29				

* These 29 are included also in the 141 who receive tuition and texts.

† Eight months, days.

‡ Six months, evenings.

COST TO THE STATE AND TO THE PRIVATELY CONTROLLED INSTITUTIONS FOR STATE SCHOLARSHIPS IN 1945-46

INSTITUTION	ACTUAL COST TO INSTITUTION IF ALL SCHOLARSHIPS HAD BEEN AWARDED IN 1945-46			DIFFERENCE BETWEEN STATE AP- PROPRIATION AND TOTAL SCHOLARSHIP VALUE	ACTUAL AMOUNT SPENT BY INSTITUTION FOR AWARD OF SCHOLARSHIPS, 1945-46			DIFFERENCE BETWEEN STATE APPROPRIATION AND ACTUAL EXPENDITURE FOR SCHOLARSHIPS	DIFFERENCE BETWEEN ACTUAL EXPENDITURES • FOR SCHOLARSHIPS AND WHAT WAS SUPPOSED TO AWARD	AVERAGE COST TO STATE PER SCHOLARSHIP- HOLDER
	Number	Value	Amount		Number	Value	Amount			
Johns Hopkins University.....	141	\$ 465	\$65,625	\$127,196	24	\$ 665	\$15,960	\$79,881	\$24,110	\$1,382.57
	29	200	5,800	71,425	67	465	31,155			
			\$71,425	\$55,771	1	200	200			
St. John's College.....	29	1,000	\$29,000	\$63,000	22	1,000	\$22,000			
	29	600	17,400	46,400	5	600	3,000			
			\$46,400	\$16,600			\$25,000	38,000	21,400	2,333.33
Washington College.....	36	610	\$21,960	\$60,000	35	330	\$11,550			
	25	240	6,000	37,460	24	140	3,360			
	50	190	9,500	\$22,540	165	100	16,500	28,590	6,050	267.88
			\$37,460				\$31,410			
Western Maryland College.....	58	630	\$36,540	\$56,500	50	630	\$31,500			
	28	280	7,840	44,380	8	315	2,520			
			\$44,380	\$12,120	1	157.50	157.50	13,537.50	1,417.50	634.83
					2	472.50	945			
					28	280	7,840			
							\$42,962.50			
Total.....	.....	.....	\$199,665	\$107,031	.....	.....	\$146,787.50	\$160,008.50	\$52,977.50	\$597.40

through the state appropriation. The next to the last column shows how far the actual awards fall below the amounts of the scholarships the institution is supposed to grant. The final column presents a calculation showing the average costs to the state for each scholarship-holder actually served in 1945-46. This calculation is warranted only on the assumption that the state intends the grant to be for scholarship purposes only, with no "concealed subsidy" to the college. The Maryland Institute is omitted from Table 40 because information could not be obtained regarding its scholarship grants.

Table 41 summarizes the number of scholarship grants and indicates the number to be awarded each year and the number per senator.

TABLE 41
TOTAL NUMBER OF STATE SCHOLARSHIPS IN PUBLICLY
AND PRIVATELY CONTROLLED INSTITUTIONS

TYPE OF INSTITUTION	POSSIBLE SCHOLARSHIPS IN FORCE AT ONE TIME		NUMBER OF SCHOLARSHIPS NORMALLY TO BE AWARDED EACH YEAR	
	Total	Average per Senator	Total	Average per Senator
Privately Controlled Institutions...	541	18.7	135	4.7
Publicly Controlled Institutions....	268	9.2	67	2.3
Total, All Institutions.....	809	27.9	202	7.0

The tabulations show that none of the institutions actually awarded as much money in scholarships in 1945-46 as it was supposed to do. In some cases this was due to lack of qualified applicants or to failure on the part of senators to make appointments. If all the scholarships had been awarded, the cost to the institutions at their regular rates for tuition and other services would have been \$199,665. This was \$107,031 less than the total appropriations to the four institutions on which the calculation is based. In other words, although the state grants to the privately controlled institutions are ostensibly based on the services rendered by the institutions in the form of scholarships, these four institutions

would have had more than one-third of the total state appropriations free for any institutional purpose if they had awarded all the scholarships.

As shown in the table, not all the scholarships were awarded. Because of failure to make scholarship appointments, the institutions were relieved of almost \$53,000 of obligation. Thus, in the actual operations of the scholarship appropriations to the four privately controlled institutions, more than half of the state grants were available for general institutional purposes without being used for scholarships for Maryland citizens. This calculation, however, is based on the stated rates charged students and does not take into account the fact that in every institution the cost of providing education is greater per student than the amount the student pays in fees.

Table 41 summarizes the total scholarship awards that are provided and indicates the number per senator. It will be noted that if all scholarships are filled, each senator has an average of about twenty-eight appointees. Inasmuch as each scholarship is normally held for a four-year period, a senator would normally have seven appointments to make each year. Slightly more than two-thirds of the appointments are in privately controlled institutions. As has been shown in preceding tables, these scholarships in the privately controlled institutions are in general much more valuable to the holders than those provided at the state institutions of higher education.

The final column of Table 40 presents an interesting calculation of the average cost to the state for each citizen who received a scholarship in these four privately controlled institutions. These averages are based only on the actual opportunities afforded students who held scholarships in 1945-46, not on the number who were supposed to hold them. The calculation of such averages is warranted only on the assumption that the intent of the state appropriation is to cover merely the service to the scholarship-holders. The average at Washington College is a modest sum, but it is much larger than the amount which the state contributes for the support

of each student at the University of Maryland, as shown in Table 35. The amount at Western Maryland College is not out of line when it is remembered that the majority of scholarships at that institution cover both tuition and board. Again, however, it must be remembered that the state supports much more generously the program for scholarship-holders at Western Maryland than it supports the general program for the students at the University of Maryland.

The costs to the state per scholarship student at both Johns Hopkins University and St. John's College are extremely high. Either the state intends the grants at these two institutions to provide something more than mere service to scholarship-holders or else the state is spending an inordinate amount on the education of a few of its citizens who are provided with scholarships at these two institutions. When it is remembered that the St. John's College holds no accreditation, the high cost to the state per scholarship student at that institution seems difficult to defend.

If the purpose of the grants to the privately controlled institutions is merely to give an education to some qualified young people, the state could help many more for the same amount of money if it applied these appropriations to the University of Maryland or other state-controlled institutions. To the extent, however, that the appropriations for scholarship purposes are intended as a method of making outright grants for general operating expenses of the privately controlled institutions, the present amounts of appropriations could doubtless be justified. Apparently there has been no deliberate adoption of such a policy of direct subsidizing to privately controlled institutions. Those responsible for directing the use of state funds should consider the wisdom of such a policy on its own merits.

Criticisms of the Scholarship System

The present system of state scholarships is open to adverse criticism on several points. In the first place, the scholarships are available only to white students, with the exception of twenty-nine that are awarded to students at

Princess Anne College. Although these twenty-nine are supposed to pay the full tuition of \$110, the amount granted was only \$38 instead of the full tuition charged in 1945-46. If the system of scholarship grants is to be continued at all, there should certainly be equal provision for Negro students. The scholarship plan must not be confused with the out-of-state scholarships available for Negro students, which were discussed in chapter ii. The out-of-state scholarships are provided only because the State of Maryland does not maintain within its own borders certain types of facilities for Negroes that are provided for white students. The out-of-state scholarship program is, therefore, merely a way of attempting to provide something like equal facilities for Negroes and in no way cares for the kind of scholarship grants provided through the senatorial scholarships. At present the Negro students are not given equal opportunities for scholarships at institutions in the state.

In the second place, the information gathered in this survey indicates that the senators are not always as discriminating as they might be in the selection of recipients of awards. Although there was universal testimony to the effect that most of the senators usually make fairly careful selections, there were several instances mentioned in which the senators had obviously looked upon the right to name the scholarship-holder as a political plum and had designated an unsatisfactory recipient. It is also reported that many conscientious senators feel that the selection of the scholarship-holders is a serious burden, a duty of which they would like to be relieved. From an educational point of view it would certainly be wise to centralize the authority for selecting scholarship-holders in some competent educational agency such as the State Department of Education. If it is desired to limit scholarship assistance to students of superior academic promise who are also from families of limited means, advice could be obtained from local social service agencies with respect to the economic position of the student. While the state senator may have the opportunity to make a reasonably good nonprofessional judgment with respect to the

economic ability of the student, he certainly is not in a position to pass judgment on the student's scholastic promise. The latter is a matter that should be assigned exclusively to some appropriate educational agency.

Another criticism of the scholarship system is that the recipients have no choice as to the institutions which they will attend. Each applicant must designate the institution he or she wants to attend when applying for the scholarship examination. The system thus does not guarantee that the very best students in the state will receive scholarships, for only the best ones in each senatorial district who happen to be candidates for appointment to an institution where vacancies exist can be selected. Thus, a well-qualified high school graduate may sometimes be led to choose a college that he would not otherwise have selected, merely because a state scholarship happened to be available there. Sometimes the senators "trade around" in order to assist candidates to get into institutions of their first choice, but such an arrangement cannot be relied upon to get the students into the colleges they really want to attend.

The suggestion was made repeatedly to the survey staff that scholarships should be awarded to the individual student and that one who wins the scholarship should then be permitted to enter any institution that will admit him. Under such a plan the appropriation for scholarship purposes would be made to some central agency, such as the State Department of Education, rather than to individual institutions. The student could use the scholarship grant in any way he wished in defraying his expenses of college attendance. The scholarships might be granted in different amounts so that students of varying levels of economic ability would be enabled to attend institutions on a fairly well equalized basis. Such a plan would probably result in some concentration of scholarship students in the institutions offering the best programs. Inasmuch as these scholarship-holders are all supposed to be young people of superior talents, such a concentration might be better than the present system.

Another criticism of the scholarship appropriations to privately controlled institutions is that these state funds are given as outright grants with no accounting or budgetary controls over the expenditure of the funds when once the appropriation act is passed. There is not even a requirement of the filing of a financial report, and no audit is made by the state to ascertain whether the expenditures are used in accordance with the specifications of the appropriation. Nobody apparently ever asks what the state is getting for its money or whether the funds are being properly or wisely expended during the fiscal year. The Johns Hopkins University does get out a beautifully printed report on its School of Engineering. The report is addressed to the legislative and state officials and describes the operations of the school and lists the scholarship-holders. The report, however, contains no detailed financial information, and no such information could be obtained for the purposes of this survey.

The policy of the state in dealing with the privately controlled institutions is quite in contrast to its policy with respect to appropriations for the state-controlled institutions. The financial operations of all the state institutions are controlled in meticulous detail by responsible state officials, as described in an earlier chapter. It is strange to find that the state gives substantial sums of money to privately controlled institutions, without any type of accounting or other financial supervision over these institutions and with no opportunity for the state to enter into the control of the institutions, and yet to find that several top-level state officials guard so carefully the financial operations of the state institutions that are completely under the control of responsible state boards. There seems to be no logic whatever in these two diverse policies with respect to control exercised over state funds as they are appropriated by the legislature.

Still another criticism of the present state grants to the privately controlled institutions arises from the confusion with respect to the justification of the grants. As already noted, the only definable return to the state is the scholarships that are granted. Yet at every one of the institutions the

total appropriation is larger than would be required to cover the scholarship grants at the usual rates of fees. Whether the state appropriations are larger than the amounts actually expended by the institutions on the scholarship-holders is not immediately apparent, because most institutions spend more per student than they charge in student fees. Careful calculation indicates that at some institutions the state appropriation does not fully cover the entire cost of serving the scholarship students, while at other institutions the appropriation leaves a considerable balance available for other purposes after the full cost of serving scholarship students is taken into account. It would seem wise, if the scholarship system is continued, to separate the appropriations and to indicate just what is intended as support for scholarships and what is intended as subsidy for general institutional purposes. Otherwise the true amount of the general subsidy is concealed when the appropriation act is passed.

Need for Review of State Policy in Grants to Private Institutions

The whole system of state scholarships needs to be carefully thought out from the state's point of view. An important question is the policy involved in making these public grants of public funds to institutions that have no control from state sources. The state must choose among four possible policies. First, it can continue the present plan, by which sums of money are wheedled out of the state by a limited number of privately controlled institutions, with scholarship grants as a sort of cover for getting money from the state to provide general operating funds in amounts that are not clearly stated. The second policy would be to set up a state system of scholarships, with the grants made to individual students who would be free to attend any institution in the state that is willing to admit them; such a system should be centrally administered and should be provided with a staff professionally competent to select scholarship-holders. A third method would be to enter into definite contracts with

the privately controlled institutions for services to be rendered to the state, something along the lines of the plan followed by the federal government during the war period in its arrangements for military training and research at selected institutions. A fourth plan would be to concentrate in the state-controlled institutions all the resources that the state can provide for higher education. A decision as to which one or ones of these possible policies should be followed ought to be made at an early date.

V. CONDITIONS WITHIN THE STATE-SUPPORTED INSTITUTIONS OF HIGHER EDUCATION

The preceding chapters of this report have dealt with the broad problems of the control and financing of the Maryland program of higher education. The purpose of the present chapter is to treat certain aspects of the situation within the various institutions that are supported by state funds in Maryland.

The data on which this chapter is based were gathered by means of personal visits and by information schedules drawn up by the survey staff and filled out in the autumn of 1946 by the officials of the institutions. A total of twenty-two schedules was used, touching practically every phase of the internal operations of the institutions. The filling-out of these schedules required considerable time and care by the members of the administrative staff and faculty in each of the institutions. The task came, furthermore, at a time when some of the institutions were extremely busy caring for the flood of students who had just enrolled for the 1946-47 term. Although in certain institutions there was some delay in returning the schedules as promptly as the survey staff had requested, in practically every instance the schedules that were filed appear to have been carefully prepared. The survey staff acknowledges its grateful appreciation for the work done by the institutional officials in this respect. It has been necessary, of course, to rely on the accuracy of the data furnished by the institutions; such tests as could be made indicated that the data were sufficiently reliable for the purposes they serve in this survey report.

The information blanks were, in most instances, duplicates of schedule forms used by the North Central Association of Colleges and Secondary Schools. Through the use of these blanks the data from the Maryland institutions could be collected in a form that is strictly comparable with the statistics available for institutions accredited by the North Central Association. It is thus possible on several points to make direct comparisons between the status of the Maryland

institutions and those accredited by the North Central Association. This enables the survey report to present some general idea of the relative quality of the state-supported institutions of higher education in Maryland in comparison with the better institutions in the twenty midwestern states within the territory of the North Central Association. Whenever such information is available and pertinent, it will be reported in this chapter; the comparisons will be referred to in terms of "accredited midwestern institutions."

Personal visits were made to each of the institutions by various members of the survey staff. The Director of the survey visited each institution receiving state support and spent at least one day examining its facilities and discussing problems with staff members. A special consultant on physical plant visited each of the state-controlled institutions. A special consultant on teacher education visited all the state institutions that prepare teachers. A special consultant on problems of higher education for Negroes visited each of the four institutions for Negro students. A special consultant on junior colleges visited most of the institutions that have special programs at the junior college level; in addition he obtained much information concerning the public schools throughout the state. A special consultant on medical education visited the School of Medicine of the University of Maryland.

In the present report no attempt is made to summarize all the information that was obtained in the visits of the survey staff or that was provided through the information schedules. This report will deal only with such matters as seem to be of general interest and importance. Selection of topics for discussion in this chapter has been made to a large extent from the point of view of their interest to the general public and their significance to those who have broad decisions to make concerning the institutions, such as the members of the legislature and the various boards that are in control of the institutions. Matters that are of concern only to the staff members within the institutions themselves are as a general rule not referred to here.

At the time of the visits to the institutions the members of the survey staff made many direct suggestions to the administrative officers. These suggestions were, of course, informal, but doubtless in many cases they would be followed by some action. The suggestions for the most part are not made a matter of record in this report, both because of limited space and because of the general policy, as indicated above, of referring here only to situations of some general significance for the entire program of higher education in Maryland.

The remainder of this chapter will be organized into sections dealing with the following topics: (1) faculties; (2) curriculums and instructional progress; (3) libraries; (4) student personnel service; (5) internal administrative organization.

FACULTIES

The faculty is often said to be the heart of any institution. No college or university can be stronger than its staff for teaching and research. An adequate and beautiful physical plant is highly desirable, and a strong administrative staff is essential for effective operations, but the most that these other facilities and agencies can do is to make it possible for the faculty members to do their best work. Because of the significance of the faculty in the evaluation of an institution of higher education, it is important in any survey to examine carefully the nature of the teaching staff and the conditions under which they work. The present report on the state-supported institutions of higher education in Maryland will deal with such topics as the scholarly qualifications of the faculty, their teaching loads, the organization of the faculty, their tenure, provisions for their welfare, and the salaries they are paid.

Scholarly Qualifications

Certain measures of scholarly qualifications of faculty members have been shown to be valid indices of the general competence of an institutional teaching staff. It is, of course, not expected that every instructor will have the highest

qualifications, but the percentages who have had extensive education and who hold advanced degrees afford a good indication of the general strength of the teaching staff. Table 42 presents four types of data concerning the preparation of the faculty members in the thirteen state-supported institutions of higher education in Maryland. The first column indicates the percentage holding the doctor's degree. The second column shows the percentage of those not holding the

TABLE 42

PREPARATION OF FACULTY MEMBERS OF PUBLICLY SUPPORTED INSTITUTIONS
OF HIGHER EDUCATION IN MARYLAND, AUTUMN, 1946

Institution	Percentage Holding the Doctor's Degree	Percentage Not Holding the Doctor's Degree Who Hold the Master's Degree	Average Number of Months of Graduate Study	Percentage Having Major Preparation at Graduate Level in Field in Which They Teach
University of Maryland.....	51.13	74.77	29.75	84.57
Morgan State College.....	32.08	83.33	21.83	91.36
Princess Anne College.....		71.43	10.57	57.14
Towson State Teachers College.....	27.27	87.50	24.56	83.78
Salisbury State Teachers College.....	41.67	85.71	22.00	69.20
Frostburg State Teachers College....	40.00	100.00	23.40	61.54
Bowie State Teachers College.....		77.77	18.67	70.00
St. Mary's Female Seminary.....		44.44	14.33	60.00
Coppin Teachers College.....	16.67	100.00	17.67	85.71
Johns Hopkins University.....	95.07	57.14	37.97	94.95
St. John's College.....	25.00	50.00	23.28	
Washington College.....	48.15	57.14	27.85	77.78
Western Maryland College.....	51.16	85.71	33.49	86.27

doctor's degree who do hold the master's degree. The third column shows the average number of months of graduate study by the members of each institutional faculty. The final column shows the percentage of the faculty in each institution who have had preparation equal to a major concentration at the graduate level in the field in which they are teaching.

No one would be surprised to find that The Johns Hopkins University has a faculty whose scholarly preparation is outstanding. There are few institutions anywhere in the United States that can boast of a faculty with as high qualifications as those shown in the table for Johns Hopkins University.

The University of Maryland also has a faculty of relatively high scholarly qualifications. With respect to the percentage holding the doctor's degree and the average number of months of graduate study, the faculty of the University of Maryland would rank in the highest 5 percent of midwestern accredited institutions. The percentage of the faculty at the University of Maryland who are teaching subjects in which they have had major concentration at the graduate level places this institution in the upper 25 percent of accredited midwestern colleges and universities. Apparently some of the faculty members at the University of Maryland are not teaching in the fields in which they have had advanced preparation.

Western Maryland College stands very high on the scholarly qualifications of its faculty. In fact it exceeds the University of Maryland on each of the four measures presented in Table 42.

Washington College also has a faculty which rates high on the percentage holding the doctor's degree and on the average number of months of graduate study. Some of those teaching at Washington College who have had considerable graduate study are teaching in fields other than those in which their preparation was made.

Morgan College has a faculty which rates high in scholarly qualifications; on each of the four measures shown in the table it is above the average for midwestern accredited institutions. On the percentage of faculty who have had major graduate preparation in the subjects they are teaching, Morgan State College rates higher than any of the state-supported institutions with the exception of Johns Hopkins University.

The state teachers colleges for white students all rate fairly high on the first three measures of faculty preparation presented in Table 42. They are well above the average for midwestern accredited institutions on each of these three factors. Only Towson State Teachers College, however, rates high on the fourth factor, percentage of faculty members who have had major graduate preparation in the field in which

they are teaching. The standing of Frostburg State Teachers College is particularly low on this last factor; this is surprising since Frostburg State Teachers College rates high on both percentage holding the doctor's degree and the percentage of the remainder who hold the master's degree. Apparently assignments to the teaching of subjects at Frostburg State Teachers College have not always been in accordance with the fields in which the faculty members have specialized.

The faculty at Bowie State Teachers College does not have the extent of preparation found in the three teachers colleges for white students. The Coppin Teachers College faculty also lacks the scholarly qualifications found in the teaching staffs of the three state teachers colleges for white students; but at Coppin Teachers College every instructor has at least the master's degree, and the institution has been relatively successful in assigning the teachers to subjects in which they have had a major concentration of graduate study.

The evaluation of the faculty of St. Mary's Female Seminary must take into account the fact that this institution offers no work beyond the sophomore year of college. Its faculty, therefore, should be expected to have on the average fewer months of graduate study than the faculty of a degree-granting institution. Teachers in the junior college should, in general, have the master's degree as a minimum qualification; less than half of the instructors at St. Mary's Female Seminary have that level of preparation. A large number are teaching in fields in which they have not had a major concentration of graduate work.

By all the measures presented in the table, Princess Anne College is shown to have a faculty with very limited scholarly preparation. Princess Anne College is a degree-granting institution offering a fairly diversified instructional program, yet it has on its staff not a single instructor with the highest academic degree, and more than one-fourth lack even the master's degree. None of the state-supported institutions ranks lower than Princess Anne College on average number of months of graduate study or on percentage of the faculty who have had a major concentration of graduate study in the field in which they are teaching.

The faculty at St. John's College does not rate high on the measures presented in Table 42. Not one of the state-supported institutions for white students ranks as low as St. John's College on the first two measures presented in the table, relating to advanced degrees held by the faculty. On average number of months of graduate study, the St. John's faculty rates at about the same place as the state teachers colleges for white students. On the final measure no data are given for St. John's College. The policy at that institution is to have every faculty member teach all the subjects in the curriculum; for that reason every instructor is almost certain to teach some subjects in which he has had no substantial preparation at the graduate level.

It must again be emphasized that, in the presentation of these measures of the preparation of the faculty, there is no implication that every instructor should have the highest level of preparation. Many capable teachers do not hold the doctor's degree; this is particularly true of those who began their service in higher institutions before the opportunities for earning advanced degrees were as widespread as they are today. Although these measures do not reflect accurately the competence of any individual faculty member, it has been demonstrated by careful investigations that they provide an excellent indication of the strength of an institutional faculty as a whole. The data must, therefore, be interpreted in that light, not as a reflection on any individual instructor whose graduate preparation may not have been extensive.

Another approach to the evaluation of the scholarly qualifications of an institutional faculty is through an analysis of the activities in which they engage both in publishing of books and articles and through association with other scholars in the various learned societies. Table 43 contains data showing the status of the faculty in each of the state-supported institutions in Maryland on each of five measures of scholarly activity.

The presentation of data regarding average number of books and articles published by faculty members should not be construed as implying that every professor ought to be

engaged in writing for publication. The average extent to which faculty members do publish scholarly books and articles, however, has been shown to be a valid index of the general competence of an institutional faculty. The mere count of the numbers of such publications has many shortcomings, which are readily recognized. For example, no account is taken of the nature or significance of the publica-

TABLE 43

SCHOLARLY ACTIVITIES OF FACULTY MEMBERS OF PUBLICLY SUPPORTED INSTITUTIONS OF HIGHER EDUCATION IN MARYLAND, AUTUMN, 1946

INSTITUTIONS	AVERAGE NUMBER OF PUBLICATIONS DURING PAST FOUR YEARS		CONNECTIONS WITH LEARNED SOCIETIES OF NATIONAL SCOPE		
	Books	Articles	Average Number of Memberships	Average Number of Meetings Attended during Past Five Years	Average Number of Program Participations during Past Five Years
University of Maryland.....	.364	2.870	.959	.635	.264
Morgan State College.....	.172	1.707	1.693	.793	.242
Princess Anne College.....	.071	.429	.857	.714	.....
Towson State Teachers College.....	.571	.891	2.330	.676	.162
Salisbury State Teachers College.....	.072	.357	2.290	.928	.072
Frostburg State Teachers College.....	.769	1.538	2.692	2.538	.154
Bowie State Teachers College.....	.....	.200	1.600	.300	.100
St. Mary's Female Seminary.....	.300	.300	1.400	.300	.....
Coppin Teachers College.....	.....	2.430	3.280	.571	.111
Johns Hopkins University.....	.723	6.750	3.670	1.830	.935
St. John's College.....	.094	.969	.812	.219	.031
Washington College.....	.143	1.680	1.710	.750	.036
Western Maryland College.....	.154	.923	1.923	1.269	.115

tions. The average number of books and articles published by the faculty members, therefore, must be taken as a somewhat crude, but nevertheless reliable, measure of the scholarly activities of an institutional faculty.

Again The Johns Hopkins University faculty stands out as a group very actively engaged in writing scholarly works for publication. The faculty of the University of Maryland rates relatively high on articles published; it is slightly above the average of midwestern accredited institutions on numbers of books published during the past five years. Perhaps the addition of a considerable number of younger faculty members

at the University in the autumn of 1946 has lowered the standing on this item.

Among the state teachers colleges, Frostburg State Teachers College seems to rate surprisingly high on faculty publication. Examination of the original returns indicates that this standing is the result of the activities of only three or four members of the faculty at Frostburg. Towson State Teachers College also rates relatively high on faculty publications, and the activities are distributed among a considerable number of faculty members.

At both Morgan State College and Coppin Teachers College there have been a suprising large number of scholarly articles published by faculty members. There have been few books published by the faculty members in any of the Maryland institutions for Negroes. It must be understood that a Negro author often has more difficulty in finding opportunity for the publication of a scholarly work than a white author of equal eminence.

St. John's College has one of the lowest rates of scholarly publication of any of the faculties for white students in Maryland. This is surprising. It might have been expected that because of the unique program maintained at St. John's College its faculty members would be unusually active in writing scholarly books and articles.

The final three columns of Table 43 present measures showing for each of the state-supported institutions the connections of the faculty members with learned societies of national scope. Although membership in most of these societies is open to any person who is willing to pay the annual dues, the extent of the connection of faculty members with groups of scholars in their own fields affords a valid index of their general scholarly interest and activity. The table presents data showing three levels of participation: (1) membership, (2) attendance at annual meetings, (3) appearance on programs for papers and addresses.

When measured by the extent of connection with learned societies, The Johns Hopkins University faculty again stands out distinctly among the Maryland institutions. The faculty

members of Johns Hopkins University appear on programs of learned societies of national scope three or four times as frequently, in proportion to their numbers, as the faculty members of any other institution in the state.

The faculties of the state teachers colleges for white students report large numbers of memberships in learned societies. The high figure for Frostburg State Teachers College with respect to attendance at learned society meetings is chiefly due to the data for one instructor who reported an almost incredible number of such attendances.

The faculty of the University of Maryland has been surprisingly inactive in making connections with learned societies. While the University of Maryland stands second among the state-supported institutions with respect to appearance of faculty members on programs of learned societies, relatively few memberships are held, and relatively few national meetings of such groups have been attended by University of Maryland faculty members in recent years.

Morgan State College stands relatively high on the connections of its faculty members with learned societies. The fact that Morgan State College rates almost as high as the University of Maryland with respect to the appearance of its faculty members on national programs of learned societies is a distinct tribute to the Morgan College faculty. It is considerably more difficult for a Negro scholar to obtain such an opportunity than for a white scholar of equal eminence.

None of the degree-granting institutions for white students have lower status than St. John's College with respect to the connection of the faculty with learned societies. It might have been expected that the nature of the program of the St. John's College would have led the faculty members to attend and participate in the national meetings of many learned societies, but apparently this has not been the case.

It is not only necessary to have a strong faculty in an effective institution of higher education, but also good personnel administration requires that provision be made for the continued professional growth of faculty members while they are in service. As a part of the survey, inquiry was made

in the state-supported institutions in Maryland regarding the kinds of aid to professional growth that are provided. The faculty members themselves were asked to report regarding the aids which they had used in their own institutions. A checklist of some twenty-three items was provided, including such features as payment of traveling expenses for attendance at professional meetings, acquisition of special library materials, conferences with deans or heads of departments regarding teaching methods, faculty or group organization for the study of college and related educational problems, and counsel of specialists invited from outside the institution.

Tabulation of results of the inquiry shows a considerable difference among the Maryland institutions in the average number of aids to professional growth reported by faculty members. In general, the state teachers colleges rank high on these items, probably indicating a degree of professional consciousness on the part of the staff members that is greater than that in the institutions not exclusively devoted to the preparation of teachers. Institutions for Negro students also seem to be provided fairly extensively with aids to the professional growth of their faculty members. The University of Maryland and St. Mary's Female Seminary fall to the bottom of the list with respect to the extent to which aids are provided for the professional growth of faculty members.

Teaching Loads

An institutional faculty can do its best work only when the teaching loads assigned to individual instructors are reasonable. At the same time the average load for faculty members must be large enough to obtain the maximum amount of service for the funds available for faculty salaries. It is a rare occurrence in American institutions of higher education, however, to find faculty members assigned to anything less than normal working load, particularly in a year such as 1946-47, when enrollments have increased greatly. There has been a tendency throughout the country to overload faculty members, and underloading is seldom found.

Two measures of teaching load are available: (1) the ratio of the number of students to the number of faculty members; (2) the average clock-hours of teaching per week by faculty members. Data on the latter of these two points were furnished directly by the teachers in the state-supported institutions of Maryland. In calculating the ratio of students to faculty members, the numbers of each were reduced to full-time equivalents. The clock-hours for teaching are calculated by counting all kinds of teaching, such as lecture, recitation, or laboratory, on the same basis; that is one hour in laboratory teaching counts as one clock-hour, just the same as one hour of lecture. The data of these two measures of teaching loads are presented in Table 44.

TABLE 44

TEACHING LOADS OF FACULTY MEMBERS OF PUBLICLY SUPPORTED INSTITUTIONS
OF HIGHER EDUCATION IN MARYLAND, AUTUMN, 1946

Institutions	Number of Students per Faculty Member	Average Number of Clock-Hours of Teaching per Week
University of Maryland.....	33.3	14.91
Morgan State College.....	19.0	16.41
Princess Anne College.....	11.1	15.73
Towson State Teachers College.....	15.3	16.34
Salisbury State Teachers College.....	13.0	18.46
Frostburg State Teachers College.....	19.1	18.00
Bowie State Teachers College.....	16.4	14.86
St. Mary's Female Seminary.....	8.9	18.30
Coppin Teachers College.....	21.5	13.40
Johns Hopkins University.....	18.4	13.26
St. John's College.....	8.7	13.57
Washington College.....	14.2	17.35
Western Maryland College.....	16.6	17.98

The ratio of students to faculty members at the University of Maryland is unbelievably high. It is more than 50 percent above the next highest institution in the state, and it is 65 or 70 percent higher than even an ardent advocate of efficient organization would normally recommend for an institution of this type. A ratio of twenty students per faculty member is generally considered an optimum for an undergraduate college. The extraordinarily high ratio at the Uni-

versity of Maryland reflects the extent to which this institution has "gone all out" this autumn in attempting to serve the great influx of students. Even at The Johns Hopkins University the student-faculty ratio is much higher than would ordinarily be expected at an institution with a heavy program of graduate instruction and research. Here is another example of the extent to which American universities have strained their resources during the current year to care for the unprecedented increase in numbers of students. Morgan State College with nineteen students per faculty member is probably operating near the peak of efficiency with respect to institutional staffing. Here is another institution that has strained its resources greatly to meet the needs of incoming students.

By no means have all the Maryland institutions the same pattern of high ratio of students to faculty members. St. John's College maintains the lowest student-faculty ratio of any state-supported institution in Maryland. This would probably be defended on the basis of the nature of the instructional program at St. John's. The state should, therefore, realize that it is helping to support at St. John's College a program which is probably inherently more expensive than the standard variety of higher education. Whether the St. John's program is worth the added cost involved in the low student-faculty ratio is an issue that cannot be decided until after a long period of experimentation and close observation.

At St. Mary's Female Seminary, Princess Anne College, Salisbury State Teachers College, and Washington College, the low student-faculty ratios are basically due to small enrollments. It is true that all except the first of these institutions have increased their enrollments over preceding years, but each of these institutions is still operating far below the enrollment that would be necessary for maximum efficiency. These institutions must have a certain number of faculty members to maintain their instructional programs; but because they have only relatively small numbers of students, the faculty must be proportionately larger than it would be

in an institution of 750 or more students. Both Towson and Bowie State Teachers Colleges could increase their student-faculty ratios and also improve the variety of their instructional programs if their enrollments were considerably larger than at present.

The average clock-hour teaching loads per week for the faculties in the various institutions are all at least as high as they should be and some of them are higher than would be desirable if a sufficient number of instructors could be found to provide adequately for the student enrollments. The average teaching hours per week at the state teachers colleges and at Morgan State College are considerably higher than they should be in this type of institution. The extended load for faculty members at Morgan State College is doubtless a response to the great influx of students. At the state teachers colleges, however, the heavy loads of teaching probably result from the opposite cause, namely, the necessity of providing a fairly broad and varied program of courses for a relatively small student body. The average hours of teaching per week at both Washington College and Western Maryland College are excessive. These two institutions have apparently chosen to keep the size of their classes low by scheduling more than the normal number of classes weekly for each instructor. In the interests of good teaching it would be better to keep the teaching hours per week at a lower figure and to allow the average size of classes to increase for so long as adequately qualified instructors are as scarce as they are at present.

The general conclusions from the study of teaching loads is that at none of the institutions supported by state funds are the faculty members failing, on the average, to carry loads heavy enough to earn their salaries. At certain institutions the faculty members have been put under serious strain and are carrying overloads to meet the greatly expanded enrollments. At other institutions enrollments are too small to permit an economical organization of the instructional program.

Faculty Organization

A group of competent scholars becomes an effective institutional faculty only through the medium of an effective organization. Academic tradition and currently recognized standards both demand that the instructional program be subject to the general direction of the faculty organized as a legislative or policy-forming body. It is important, therefore, to inquire concerning the extent to which the Maryland institutions have their faculties organized effectively for the control of educational policy.

All the state-controlled institutions in Maryland report that they have some kind of faculty organization, with the exception of Frostburg State Teachers College. At the Towson and Bowie State Teachers Colleges the management of academic affairs is placed in the hands of a committee of the faculty rather than in an organization consisting of all members of the institutional staff. At Morgan State College and St. Mary's Female Seminary, the entire faculty holds membership in the academic legislative body. At the University of Maryland the entire instructional staff is considered as a faculty body, but the real authority seems to be centered in the Administrative Council composed chiefly of deans and other executive officers. At the University of Maryland the various schools have their own faculty organizations, and within certain schools the various departments also have faculty bodies to which some academic authority is granted.

In order that there may be no confusion about the powers and functions of the faculty as a legislative group, it is important that such matters be defined by a constitution or a set of statutes or some other authoritative document. Such a document is lacking at the University of Maryland and also at each of the other state-controlled institutions except the Towson State Teachers College and Morgan State College. In the latter institution the authority of the faculty is definitely specified in article 5 of the bylaws, and the administrative policies concerning academic departments are laid down in an official statement. This is a most desirable arrangement. It would be well for each of the institutions that does not

now have a definite constitution for the faculty to draw up such a statement. The constitution or statutes of the faculty should have the approval of the board controlling the institution.

Absence of an official constitution does not necessarily mean the faculty is granted no powers or influence over the academic program. The Maryland institutions seem to vary widely with reference to the extent to which the faculty as a group is consulted on important matters of policy. Without specifying here any particular institutions, it would seem to the survey staff desirable for each institution to examine its present practices and policies, to determine whether maximum use is made of the important contributions that a well-organized faculty group can make in determination of academic policy.

The membership of the faculty legislative group should include not only all those who give instruction but also all the administrative officers who have responsibilities that affect the educational program. This would include such officers as the registrar, the librarian, and the business manager. In none of the Maryland institutions is the business manager a member of the faculty legislative body (except at the University of Maryland where he is on the Administrative Council), and at certain institutions the librarian or the registrar is not recognized as a member of the faculty group.

In a well-managed institution the faculty members are grouped into departments or divisions according to their academic fields of study. This arrangement permits the consideration of matters affecting only one department or division by the appropriate members of the instructional staff. This kind of arrangement is maintained at the University of Maryland, Morgan State College, and Towson State Teachers College. The other institutions report that their teaching staffs are too small to make a departmental organization desirable.

The departmental organization at the University of Maryland could benefit by some readjustments. The assignment of departments to schools seems questionable in certain instances. Some departments that are normally found as a

part of a college of arts and sciences are assigned to professional schools, such as agriculture or business and public administration. This is a matter to be worked out by the internal administration of the University, however, rather than by any outside agency.

It is customary in degree-granting institutions in the United States to assign academic rank to faculty members, reflecting the extent of their scholarly preparation, the length of their tenure, and their general eminence in the academic world. Such assignment of rank is not common in junior colleges or other institutions that do not grant degrees. It is, therefore, not surprising that St. Mary's Female Seminary assigns no academic rank to faculty members. The state teachers colleges also have no academic rank for faculty members. This condition is probably a relic of the period when these institutions were normal schools and did not grant degrees.

Faculty Tenure

An important characteristic of the academic staff in a well-organized institution is a reasonably long tenure and a low turnover, especially in the higher academic ranks. Data for length of tenure, however, are always difficult to interpret because they must be considered in relationship to a number of other factors, particularly to academic qualifications and salary. For an institution to have a faculty with long average tenure, but with low qualifications and low salaries, is an indication of weakness rather than strength. Furthermore, an institution which is rapidly growing will inevitably have a lower average tenure than one which is not experiencing growth. Data on the average tenure of the faculty members in the state-supported institutions in Maryland were collected as part of the survey. The tabulations are presented in Table 45.

There has been an excessively high rate of turnover of faculty members at St. Mary's Female Seminary and the Princess Anne College. The average tenure at St. John's College is also relatively low. The average tenure at Morgan

State College is relatively low for the higher-ranking faculty members, but this is doubtless caused by the rapid growth that has recently occurred in this institution. At the other institutions the average tenure seems to be long enough to indicate a reasonably stable instructional staff.

The observable facts concerning the length of tenure of faculty members do not always tell the whole story with respect to tenure within an institution. Academic freedom is often associated with the policies regarding tenure. A state-

TABLE 45

AVERAGE TENURE OF FACULTY MEMBERS BY RANKS AT THE PUBLICLY SUPPORTED INSTITUTIONS OF HIGHER EDUCATION IN MARYLAND, AUTUMN, 1946

INSTITUTIONS	AVERAGE YEARS OF TENURE OF FACULTY MEMBERS OF EACH RANK				
	Department Heads	Other Full Professors	Associate Professors	Assistant Professors	Instructors
University of Maryland.....	13.0	8.0	5.0	4.0	2.0
Morgan State College.....	5.7	2.0	11.3	4.1	2.0
Princess Anne College.....	5.8	2.0	1.0		
Towson State Teachers College.....					10.5
Salisbury State Teachers College.....					10.0
Frostburg State Teachers College.....					7.5
Bowie State Teachers College.....					7.6
St. Mary's Female Seminary.....					3.3
Coppin Teachers College.....					6.0
Johns Hopkins University.....	12.5	3.5	5.0	3.0	2.0
St. John's College.....	6.0				5.0
Washington College.....	10.6	15.0		6.3	7.6
Western Maryland College.....	16.0	4.5	10.0	8.3	3.3

ment drawn up some six or seven years ago by two national associations sets forth certain basic principles of tenure and academic freedom that are now generally recognized as wise for American colleges and universities. As a part of the present survey, this statement was submitted to the officials of each of the state-supported institutions in Maryland, with the request that an indication be given as to whether there is anything in their present policy with respect to academic freedom and faculty tenure that is in conflict with this statement. All the state-supported institutions, with the exception of The Johns Hopkins University, reported unqualified

agreement with the principles in this statement. The officials at Johns Hopkins University who filled out the information schedule indicated disagreement with only one paragraph of the statement. In general, therefore, it can be said that the state-supported institutions of higher education in Maryland acknowledge as binding upon them the principles and policies regarding academic freedom and tenure that have been recognized as valid for American institutions of higher education.

The actual policies with respect to permanence of tenure vary considerably in the different state-supported institutions. The state teachers colleges report that permanent tenure is granted after two years of probationary experience. Quite the opposite policy is followed at St. Mary's Female Seminary, which has no stated policy with respect to tenure of faculty.

Morgan State College has an excellent and detailed statement outlining explicitly the conditions of faculty appointments. The final section of the Morgan State College statement, however, reserves to the Board of Trustees the right to ". . . deviate at any time for good and sufficient reason from these regulations . . .," a provision which in effect nullifies the entire value of the regulations, except as they indicate a general intent on the part of the board and administration.

The conditions of faculty tenure at the University of Maryland are covered by article 2, section 2, of the bylaws of the Board of Regents. This section states that ". . . it is the sense of the Board of Regents that appointments of all officers above the rank of Assistant Professor shall be considered as permanent, subject to satisfactory performance of work, and further that any member of the staff may be discharged in accordance with law in the event of conduct prejudicial to the University . . ." The whole effect of such a statement is to give no assurance of tenure to faculty members. It would be desirable to be much more explicit in stating what is meant by "according to law," in defining "conduct prejudicial to the University," and in specifying the procedure by which a person may be adjudged guilty of such conduct.

The present provisions at the University of Maryland mean that faculty tenure is definitely at the will of the administration. This is contrary to sound academic practice, and in the long run such a policy will make it difficult for the University to attract and retain the most competent scholars. Even though a given administration may operate under these provisions to the entire satisfaction of the faculty for many years there is always the possibility of a change which will make it difficult for capable faculty members to be assured of the customary rights of academic freedom and secure tenure.

Faculty Salaries

Everyone knows that in order to attract and retain capable faculty members adequate salaries must be paid. Although most college faculty members do not enter upon that profession because of the large amounts of money that they can make, the salaries paid must be large enough to permit the instructor and his family to live comfortably and to carry on the kind of pursuits that are necessary to effective work as a scholar. What constitutes an adequate salary in a given institution depends on the level and type of instructional program, the fields in which instruction is offered, and the general opportunities available to qualified personnel elsewhere, both in other colleges and universities and in agencies outside the academic world.

Table 46 shows the salary data reported by the faculty members of the publicly supported institutions of Maryland. The salaries reported have all been equated to nine months' service for the usual academic year. The tabulation excludes faculty members who give only part time to the institution, and also administrative officers who do not devote the major part of their time to teaching. The amounts include any compensation that is given in the form of board and room and similar perquisites.

The tabulation shows for each institution the median salaries and the maximum salaries for members of the staff who devote practically their whole time to instruction or research. The median indicates the point above which and

below which half the salaries fall; that is, the figure of \$3,000 as the median salary at the University of Maryland means that half the faculty members get this amount or more, and half get this amount or less.

It will be noted immediately in this tabulation that the salaries at Princess Anne College and Morgan State College are extremely low. Average salaries in these two institutions

TABLE 46
INSTRUCTIONAL SALARIES IN THE PUBLICLY SUPPORTED INSTITUTIONS OF
HIGHER EDUCATION IN MARYLAND, AUTUMN, 1946

Institutions	Median Instructional Salary	Maximum Instructional Salary
University of Maryland.....	\$3,000	\$7,050
Morgan State College.....	2,250	3,350
Princess Anne College.....	2,050	2,750
Towson State Teachers College.....	3,150	4,250
Salisbury State Teachers College.....	3,100	3,850
Frostburg State Teachers College.....	3,350	3,800
Bowie State Teachers College.....	3,150	3,600
St. Mary's Female Seminary.....	2,100	2,350
Coppin Teachers College.....	2,850	3,350
Johns Hopkins University.....	4,000	7,800
St. John's College.....	2,600	4,500
Washington College.....	2,838	3,750
Western Maryland College.....	2,800	4,250

are less than beginning elementary or secondary school teachers are paid in many public school systems. It is clear that here is an outstanding instance in which the State of Maryland is not affording Negro students opportunities for education that are equivalent to those offered to white students.

The salaries at St. Mary's Female Seminary are also very low. This institution maintains only a junior college program, so that it would not need as high an average salary as the degree-granting institutions. Even so, the average and the maximum salaries at St. Mary's Female Seminary are far below the level that is necessary to attract and retain competent junior college teachers. It will be recalled that previous tabulations showed a high rate of turnover in the teaching staff at the St. Mary's Female Seminary and a con-

siderable number of instructors without any graduate degrees. The high rate of turnover and the relatively limited preparation of the St. Mary's faculty are without question connected with the low salary scale.

The median salary at the University of Maryland is low for an institution of this type. It will be noted that even the state teachers colleges in Maryland surpass the University of Maryland in the average level of faculty salaries. The maximum salary at the University of Maryland is higher than in any of the other state-controlled institutions. This is to be expected because of the program of graduate and professional work maintained in the University. In fact, the maximum salary shown for the University is far below the level paid in many of the better institutions of the country. Unless the University of Maryland can be provided with funds that will permit it to pay salaries well beyond the present maximum, it is certain to be continually losing its most capable scholars, those on whom the scholarly reputation of the University most depends.

At the state teachers colleges the maximum salaries seem entirely too low. In these days competent young graduates with the Ph.D. degree, and with only the minimum of experience readily obtain teaching positions at salaries well above the maximum paid in state teachers colleges in Maryland. It will be difficult to build up and retain a well-qualified faculty in these institutions unless the top salaries can be considerably increased. Any increase in the top salaries will, of course, tend to bring up the general average of all salaries.

The salary figures shown for Bowie State Teachers College in the tabulation are presented as reported by the faculty members. The survey staff is of the opinion that the figures reported reflect salaries that are higher than the true value of those actually received at Bowie State Teachers College because of the relatively heavy charges that are made for board and room. Practically every faculty member must live in the College dormitories, and the amounts that are added to the cash salary and then deducted for payment for board and room seem excessive, in view of the much lower

charges that are made to students enjoying the same services.

The actual adequacy of faculty salaries is difficult to interpret from a tabulation such as that which has been presented. Comparative data for salaries in other institutions for the current year are nowhere available. The most recent data available for salaries throughout the United States are those collected and published by the U.S. Office of Education in 1941-42. The number of institutions for which data were recorded in that study is too small in many categories to permit reliable comparisons. All the land-grant colleges and universities in the country, however, reported their salary data, and it is therefore possible to compare the present salaries at the University of Maryland with those of similar institutions throughout the country in 1941-42. These data are presented in Table 47.

TABLE 47

MEDIAN FACULTY SALARIES BY ACADEMIC RANKS, AT UNIVERSITY OF MARYLAND IN AUTUMN OF 1946, AND AT 52 LAND-GRANT COLLEGES AND UNIVERSITIES IN 1941-42

Academic Rank	University of Maryland, Autumn of 1946	52 Land-Grant Institutions in 1941-42*
Professors.....	\$3,995	\$4,302
Associate Professors.....	2,994	3,324
Assistant Professors.....	2,683	2,645
Instructors.....	2,081	1,958

* Source: "Salaries in Institutions for Higher Education, 1941-42," *Higher Education*, November 15, 1945.

In interpreting the data in Table 47, it must be remembered that salaries have increased considerably since 1941-42. The cost of living has also gone up sharply since that time, so that the purchasing power of any given salary is much less than five years ago. A glance at the table shows that in the two highest academic ranks the University of Maryland salaries in 1946 average more than \$300 below the 1941-42 median of similar institutions throughout the country. The fact that the University of Maryland salaries in the two lowest ranks are now at approximately the same level as for comparable institutions five years earlier also gives some indication as to how far the State of Maryland has lagged

behind other states in providing conditions which will attract and hold the most capable young scholars.

It is clear that unless faculty salaries are improved rapidly, the Maryland institutions are certain to meet increasingly serious difficulties in maintaining the kinds of teaching staffs that are needed for the effective instruction of young people. The provision of the funds necessary for the institutions to pay satisfactory salaries to their teaching staffs is one of the most important obligations facing the state legislature.

Faculty Welfare Provisions

Institutions commonly furnish certain services to faculty members which in some way extend the compensation provided through regular salaries. Among such services are sabbatical leaves, retirement plans, insurance, housing, and recreational facilities.

The University of Maryland and Morgan State College are the only state-controlled institutions in Maryland that provide a system of sabbatical leaves for their faculty members. A plan for sabbatical leaves has great advantages both to the institution and to the faculty members, for leaves of this sort afford the opportunity for additional preparation and new experiences that vitalize the teaching service. The provisions at the University of Maryland are standard, but apparently relatively few faculty members have been able to take advantage of them. The University reports that only one-third of those eligible for leaves have availed themselves of the privilege in the past five years. This situation may in part be due to conditions which require the institution to keep its faculty members in service even though they are entitled to leaves. The Morgan State College plan is also standard, but it is practically inoperative, for only 8 percent of those eligible for leaves have taken them in the past five years.

All employees of the state-controlled institutions in Maryland are either under the Teachers' Retirement System or the Employees Retirement System of the state. It is highly commendable that arrangements have been made to cover the

nonacademic employees as well as the academic staff. In this respect Maryland has better arrangements than are found in many other states. It is also commendable that a state-wide system is in effect to provide for the retirement of faculty members. The general observation of the survey staff is that the allowances for retired academic personnel in the state-controlled institutions are too low to permit a satisfactory standard of living after retirement. Otherwise, the plan seems to provide for meeting satisfactorily the generally understood standards for a retirement system for faculty members.

Insurance protection for faculty members, covering life, accident, and hospitalization, is a feature of faculty welfare services provided in many well-managed institutions. Among the state-controlled institutions in Maryland, Morgan State College, Bowie State Teachers College, and St. Mary's Female Seminary report no provision whatever for insurance protection for faculty members. The three state teachers colleges for white students have arrangements for hospitalization insurance and accident insurance for faculty members, but have no provisions for group life insurance. The plan at the University of Maryland includes only accident insurance, and it is participated in by a relatively small percentage of the staff members. The institutions in Maryland could well afford to take the initiative in setting up group life insurance plans for their faculty members.

The provision of housing for faculty members is being increasingly made a feature of faculty welfare programs in well-managed colleges and universities throughout the country. Especially in these times, when housing is scarce, the institution that can offer a prospective faculty member the opportunity to rent a desirable home is in a fortunate bargaining position when seeking well-qualified new staff members.

Faculty housing has had little development in the state-supported institutions in Maryland. At the Bowie State Teachers College all the faculty members room in the student dormitories, but there are no facilities for instructors with

families. At St. Mary's Female Seminary it is also practically a requirement that every faculty member live in the dormitory. Morgan State College has residences for four or five staff members, and some of the instructors are provided with accommodations in the dormitories. The three state teachers colleges for white students have no provisions for faculty housing, except at Frostburg where temporary quarters have been provided this autumn in the dormitory basement for one new faculty family. At the University of Maryland no provision is made for faculty housing.

As a part of its capital-outlay program, the state might well consider the provision of faculty housing at each of the institutions of higher education. The need is more urgent in some than in others owing to differences in the availability of satisfactory housing in the various communities. Faculty housing can be provided on a self-financing basis so that the income from rents will eventually amortize the capital investment.

Not one of the state-supported institutions of higher education in Maryland has clubrooms or a clubhouse for faculty members. This is generally recognized as a desirable provision in a modern institution of higher education. The cost of setting up a faculty club is frequently shared by the staff members who benefit. Usually the institution furnishes the space and provides heat, light, and normal maintenance, while the faculty members bear the expense of special furnishings and costs of operating facilities such as lounges, library, dining room, and social activities carried on in the club. While faculty clubrooms are not the most urgent need in the Maryland institutions, the fact that none of them have such facilities is another evidence of how far the state has lagged behind the general provision made in other states for institutions of higher education.

None of the state-supported institutions in Maryland has a program of regular health service for faculty members, other than emergency treatment in the student health service. The usual facilities for athletic games and physical education are open to faculty members as well as to students.

Programs of lectures, concerts, and similar entertainments are sponsored by most institutions for the benefit of both students and faculty members.

The general conclusion from these analyses is that the Maryland institutions provide far fewer of the faculty welfare services than are customarily found in similar institutions throughout the United States.

CURRICULUMS AND INSTRUCTIONAL PROGRAMS

It is generally agreed among college and university administrators that any change in curriculum and course offerings is best accomplished through faculty study and action. The virility of a college faculty in an individual institution is reflected in the amount of study given curriculum problems. Through a program of constant study of the curriculum college faculties may keep course content closely adjusted to the needs of the student body.

The academic programs of the state-controlled institutions of higher education in the State of Maryland are remarkably free from duplication. The University of Maryland is the only institution that offers graduate work on the master's and doctor's degree levels. The University of Maryland and Morgan State College are the only two state-controlled institutions which offer a bachelor's degree in liberal arts. Two-year college-level liberal arts programs are offered at the four state teachers colleges, Princess Anne College, St. Mary's Female Seminary, Montgomery Junior College, and Hagerstown Junior College. The University of Maryland is the only state-controlled institution that offers curriculums in business, dentistry, law, medicine, nursing, pharmacy, and engineering. In agriculture a separate curriculum is maintained at Princess Anne College for Negroes, in addition to the extensive curriculum for white students at the University of Maryland. Two of the Negro colleges—Princess Anne College and Morgan State College—offer curriculums in home economics; the University of Maryland has the only curriculum in the state for white students in home economics.

Five of the Maryland state-controlled institutions of higher education have curriculums for preparing elementary school teachers. Four of these are for white students and one is for Negro students. In addition, Coppin Teachers College, which is controlled by the City of Baltimore, prepares Negro elementary school teachers for the schools in Baltimore. The training of secondary school teachers in state-controlled institutions is limited to the University of Maryland for white students and Morgan State College for Negro students.

A curriculum in mechanic arts is maintained at Princess Anne College, and in music at Morgan College; none of the institutions for white students have curriculums in these fields. It is distressing to note the lack of emphasis on music in the state-controlled institutions for white students.

It should be remembered that the privately controlled colleges in Maryland, which normally enroll a large percentage of the state's students, are an important factor in the educational pattern. Four-year liberal arts programs are maintained in thirteen of these colleges, and graduate work is maintained in five of them. In addition the private colleges provide curriculums in art, kindergarten, medical technology, theology, public health, and journalism, which are not provided in the state-controlled institutions of higher education.

General Education

An analysis of the curriculums of the state-controlled institutions in Maryland indicates awareness of the needs for general education and an effort to organize curriculums so as to provide a broad, general training for their students. The University of Maryland and Morgan State College have divisional organizations which group departments into larger units and provide means for broader types of training. This is a progressive and commendable arrangement. The other institutions, which do not have the divisional type of curriculum organization, do not have an inordinate number of departments. There are nine departments at Salisbury and Frostburg and ten at the Towson State Teachers College. St. Mary's Female Seminary has eleven departments. At Prin-

cess Anne College course offerings are grouped into nine fields of study.

The programs of general education in the junior colleges installed at the state teachers colleges all have glaring weaknesses in certain fields of study. The lack of adequate laboratory-science courses at these institutions seriously weakens the general education programs. That thorough courses in science have not been a part of the preparation of elementary school teachers in the past is difficult to understand, inasmuch as teachers at that level certainly have need for sound, well-taught science courses in order to give proper instruction in that field to elementary school children.

The state teachers colleges and the State Department of Education should be commended for their work in bringing nationally known educational authorities into the state to encourage the study of problems of child growth and human development. This is an indication that the staff members of these institutions want to understand the child better and to be able to train the future teachers along modern lines of thought.

Curriculums which provide two years of training in certain fields of study, often called "terminal education," were not maintained in any of the Maryland state-controlled institutions for white students until this autumn, when the Montgomery and Hagerstown Junior Colleges were opened. Princess Anne College has listed a few of these short curriculums for Negro students in the past. The need for terminal education has been sufficiently proved to warrant the installation of these curriculums, especially in junior colleges when they are accepted as a part of the general pattern of post-secondary education in the State of Maryland.

Preparation for Good Citizenship

The Commission specifically instructed the survey staff to inquire into the extent to which the state-supported program of instruction in Maryland is providing the kinds of courses and teaching that should lead young people to appreciate the advantages and responsibilities of living in a modern demo-

cracy. Sometimes such instruction is referred to as "citizenship education."

The survey staff found that in almost all the Maryland institutions special emphasis is given to citizenship education. Courses in American history and the social sciences are commonly required in the curriculums. So far as the survey staff could discover, these courses are being effectively taught. In only two institutions does the curriculum seem to lack the usual emphasis on this field of study. At St. Mary's Female Seminary the one course in American history is set up as an elective in the second college year; many students who drop out before this point do not receive this instruction, and other students may substitute some other course for it. The curriculum at St. John's College is not cast in the usual form, and for that reason the survey staff could make no analysis to determine at that institution the extent to which the instructional program emphasizes a sound knowledge of American history and institutions.

Graduate Study

Opportunities for graduate study in the state-controlled institutions are at present concentrated at the University of Maryland. Negroes who wish graduate courses may receive scholarships for attendance at institutions in other states, since there are no graduate programs for Negroes in the state-controlled institutions in Maryland. As has been pointed out previously in this report, the provision for scholarships does not meet the test of the equal facilities that are legally required when the races are separated for education.

The Graduate School at the University of Maryland was organized in 1919. It is administered through the office of the Graduate Dean, under the general control of the Graduate Council.

The program at the University of Maryland provides for the master's degree in practically all fields of the curriculum. The Ph.D. degree has been given in twenty-five different fields of study. The enrollment of graduate students in the

autumn of 1946 totaled 1,013. The University of Maryland has not yet achieved the strength that would lead to membership in the Association of American Universities, the status that is generally recognized as the highest possible level of accreditation for a university which offers graduate work leading to the Ph.D. degree.

One of the great handicaps at the University of Maryland in the development of a sound program of graduate work has been the relatively rapid turnover of faculty members. For example, a well-qualified faculty member may be brought to the University and may start a program of graduate work in his special field. After continuing for some time and attracting a group of capable students, the professor may receive a tempting offer to go elsewhere, and the University is often unable to afford a salary that will keep him. As a result he leaves, and graduate work in that particular field languishes. Because of this situation there has been a spotty development of advanced graduate work at the University of Maryland, with no long-continued and well-developed program in evidence in most of the fields.

At the level of the master's degree the University can well afford to serve broadly the needs of a diversified student body; it is reasonably well equipped for that service. The survey staff gained the impression that the University is attempting to offer work leading to the doctor's degree in too many departments. It might be better to concentrate on fewer fields for the Ph.D., and to choose deliberately those fields of specialization that will utilize the best services of the most competent members of the University. In the programs for the Ph.D. degree the University of Maryland will inevitably be compared with Johns Hopkins University, which has a national recognition for strength in certain academic fields. There might well be some agreement between these two institutions with respect to departments of study which each will emphasize in programs leading to the Ph.D. degree, at least until the University of Maryland has more resources than at present for advanced graduate study in a wide variety of subjects.

Teacher Education ¹

The most urgent problem confronting those concerned with teacher education in 1946-47 is to get enough qualified teachers to meet the demands of the schools. Serious teacher shortages exist throughout the country, and the situation in Maryland is no exception. According to the most recent annual report of the Board of School Commissioners of Baltimore City, there are over four hundred positions in the public schools of that city that cannot be filled by fully certified teachers. Similar shortages exist in the counties of the state.

There are three major reasons for this nation-wide and state-wide shortage of teachers. In the first place increasing birth rates in recent years have been responsible for increasing the school population, now beginning in the lower grades. The total enrollment in the first grade in all schools in Maryland for the year ending in June 1944 was 34,470 as compared with 29,482 in the second grade, according to the 78th Annual Report of the State Board of Education. According to the same report the birth rate in Maryland per 1,000 white persons increased from 16.7 in 1940 to 22.7 in 1943. The birth rate for Negroes increased from 22.8 to 25.5 during the same three-year period. With this rapid increase in birth rate the normal demand for teachers will continue to increase for many years, as the larger numbers of children advance through the elementary and secondary schools; the demand will remain heavy as long as the birth rate continues at the present high levels.

A second major cause of current teacher shortages lies in the number of teachers who are leaving the profession. According to figures released by the State Superintendent of Schools a total of 1,326 teachers withdrew from teaching positions in Maryland counties between June 1945 and May 1946. In one county more than 80 percent of the white teachers withdrew.

The third major factor causing teacher shortages is the decrease in the number of persons entering the teaching

¹ The report on teacher education was prepared by a special consultant to the survey staff, Dr. William J. Haggerty, president of New Paltz State Teachers College, New York.

profession. The attendance at the four state teachers colleges dropped from 1,198 during the school year 1939-40 to 550 during the year 1944-45. An assistant superintendent of the Baltimore Board of School Commissioners estimates an average yearly need for about 135 white elementary school teachers. Yet the number of Baltimore students graduating from the State Teachers College at Towson, which has been the major source for such teachers, has averaged only 44 annually for the last five years. It is estimated that only 25 percent of the new teachers needed for the elementary schools of Baltimore City can be secured from institutions within the state. The number of teachers coming into the schools of the counties from outside the state increased from 62 in 1939-40 to 493 in 1943-44.

With more teachers needed because more children are attending school, with large numbers of teachers leaving the profession, and with fewer persons entering the profession, the resulting shortage of teachers has created a critical situation that cannot be fully met for several years. It should be noted that the decrease in the enrollments at the Maryland teacher-education institutions has stopped during the last year and that increases in enrollments are generally reported for the current year and in some cases for the preceding school year (1945-46). These increases, however, have chiefly been in the students entering liberal arts programs of junior college level, and not in those entering the teacher-preparation curriculum.

The second urgent problem facing those responsible for teacher-educating institutions is the need for raising the qualifications for admission to the profession. The job of the teacher is growing more difficult as the social environment becomes more complex. With a growing need for improving the quality and competence of teaching personnel, however, the standards for admission to the state teachers colleges have been lowered in order to attract more prospective students. Probably the most important single factor involved in attracting desirable candidates to the profession at present is an adequate salary. In this connection it should be pointed

out that both the state legislature and the Baltimore Board of School Commissioners have recently taken steps to improve the financial status of teachers. Such increases as have already been granted, however, have not created sufficient inducement to attract the more able high school graduates into the teaching profession.

These two major needs—more teachers and better teachers—have several implications for institutions preparing teachers. There are at present in Maryland eight publicly controlled higher institutions in which teacher education is the major, or one of the major, functions. This group includes four state teachers colleges, the University of Maryland, Princess Anne College (the Negro land-grant institution), Coppin Teachers College for Negroes operated by the City of Baltimore, and Morgan State College for Negroes. There are, in addition, more than ten privately controlled colleges and universities in the state that engage in teacher education to some extent. There are four boards of control that are responsible for the publicly controlled institutions in Maryland. There are two agencies in the state which certify or license teachers—the State Board of Education and the Baltimore City Board of School Commissioners. The preparation of specialized teachers is largely the responsibility of the University of Maryland, Morgan State College for Negroes, and the privately controlled institutions, although no plan has been worked out to insure an adequate supply of teachers of special subjects in terms of the relative demands in different fields. If the best use is to be made of existing facilities for preparing teachers, greater coordination is needed in planning the allocation of various teacher-education functions among institutions.

Publicly controlled institutions preparing teachers

The eight publicly controlled institutions in Maryland that prepare teachers have already been mentioned. Only one of these eight institutions, Coppin College, confines its activities exclusively to the preparation of teachers. The four State Teachers Colleges at Bowie, Frostburg, Salisbury,

and Towson offer two-year general college programs in addition to their four-year teacher-education curriculums for the preparation of elementary teachers. The University of Maryland offers the wide variety of undergraduate, professional, and graduate work generally found in state universities, in addition to the campus program for preparation of secondary teachers and the extension-course program for both elementary and secondary teachers. Morgan College offers a four-year liberal arts course and several preprofessional programs in addition to its curriculum for preparing secondary school teachers. Princess Anne College, the land-grant college for Negroes, offers work in general education in the first two years for students wishing to transfer to other colleges, vocational curriculums in agriculture, home economics, and industrial arts, and also programs for preparing teachers of vocational subjects.

The four State Teachers Colleges are located at: Bowie, about half way between Baltimore and Washington, D. C.; Frostburg in the western part of the state about thirty miles from the Pennsylvania line; Salisbury on the Eastern Shore; and Towson, a suburban community north of Baltimore. These four teachers colleges are each administered by a president responsible to the State Superintendent of Schools and the State Board of Education. The four presidents meet from time to time with the State Superintendent of Education and the Director of Teacher Certification in the State Department of Education and recommend to the State Board of Education general policies for the four institutions. These governing policies, applying to all four of the teachers colleges, pertain to a great variety of subjects. Among the more important are those defining the curriculums, those relating to the admission, retention, transfer, and graduation of students, those concerning the salaries, tenure, and qualifications of the instructional staff, and the requirement that all students, at the beginning of their junior year, must sign a "pledge to teach" in the public schools of the state for two years following graduation.

The curriculum pattern for the degree of Bachelor of Science in education is the same in each of the teachers

colleges. This pattern consists of the following distribution of courses:

Subject	Semester Hours
<i>English:</i>	
English and American Literature	6
Composition	6
Electives (Required in English)	6
	<hr/> 18
<i>Social Sciences:</i>	
European History	6
American History	6
Geography	6
Electives (Required in Social Science)	6
	<hr/> 24
<i>Science and Mathematics:</i>	
Biological Sciences	6
Physical Sciences	6
Mathematics	3
	<hr/> 15
<i>Art and Music:</i>	
Fine and Industrial Arts	3
Fundamentals of Design	3
Music Literature	3
Music Fundamentals	3
	<hr/> 12
<i>Physical and Health Education:</i>	
Health Education	3
Physical Education	6
	<hr/> 9
<i>Education:</i>	
Educational Psychology	6
Curriculum Methods and Materials	12
History of Education	2
Children's Literature	3
Directed Teaching	16
	<hr/> 39
Free Electives (Not more than nine semester hours in any one subject)	11
Total	<hr/> 128

The foregoing curriculum pattern for the preparation of elementary teachers compares favorably with the better programs throughout the country. Thirty percent of the four-year program is professional; the other 70 percent consists of general education designed to create effective citizens in American society and to produce teachers with a broad liberal education. The elective courses are determined by each institution.

One area in which the curriculums in the state teachers colleges are deficient is in the field of international understanding. None of the four colleges offers courses in modern languages with the exception of a recently organized course in French in one institution; only one (Salisbury) offers a course in international relations. The traditional courses in world literature, history, and geography, which are offered in each institution, provide some opportunity for students to become acquainted with the peoples and cultures of other parts of the world. If, however, future teachers are to have an important part of the responsibility for securing and maintaining world peace, they must be adequately prepared through appropriate education for that task.

Another deficiency is in the field of homemaking. No provision is regularly made for students to take courses which will give them the necessary preparation for managing a home, yet many of them will have such responsibilities whether they stay in the teaching profession or not.

The curriculum for students expecting to transfer from the State Teachers Colleges at Frostburg, Salisbury, and Towson at the end of two years to other institutions parallels the first two years of the four-year teacher-education curriculum except for the requirement of specific courses. The particular courses taken by students in the two-year program are determined primarily by the requirements of the institutions to which the students expect to transfer.

In addition to curriculum patterns, the four state teachers colleges have common policies with regard to certain regulations pertaining to students. Admission requirements have been set by the State Board of Education. In order to be

admitted a student must meet the following stated requirements:

1. Be a citizen of the United States.
2. Graduate from a standard public high school or accredited nonpublic secondary school. Graduates of nonpublic Maryland and out-of-state schools must have the recommendation of their principals and have completed a total of sixteen units including four in English, one in mathematics, one in United States history, and one in another social science, and one in science.
3. Receive the recommendation of the principal and the county superintendent [if a graduate of a standard public high school in Maryland].
4. If from one of the counties of Maryland, have made a grade of A or B in at least 60 percent of all college entrance courses and an average grade of at least C in all courses taken during the last two years of high school. A graduate of Baltimore City high schools must have made an average of 80 percent in last two years of high school work.
5. Pass a thorough physical examination by the college physician.

While these requirements would ordinarily secure a better than average group of college freshmen, the high school scholarship requirements have been relaxed during the last few years, and many students whose high school scholarship is below the stated requirements have been admitted. The county superintendents work closely with the presidents of the teachers colleges and frequently follow the progress of the students they recommend for admission, with a view to employing them in the county upon graduation.

Costs to the students attending each of the state teachers colleges for white students are about equal. For Maryland residents board and room, including laundry, is \$216 per year, expenditures for books \$10, and activities fee \$10, making a total cost for the school year of \$236. No tuition fee is charged Maryland residents. Out-of-state students pay a fee of \$100 a semester or \$200 for the school year, making a total cost of \$436 for the year. The total cost to students attending the Bowie State Teachers College for Negro students is \$81 less per year, or \$155 for Maryland residents and \$355 for out-

of-state students. These costs are relatively low compared with those of teachers colleges in other states; Maryland should take pride in having reduced the costs of getting an education for prospective teachers.

In 1943 a salary schedule for the instructional staff of the teachers colleges was adopted. This schedule provides different salary ranges for persons with different degrees as follows:

For persons with the A.B. degree:	\$2,000 to \$2,500
For persons with the M.A. degree:	\$2,400 to \$3,600
For persons with the Ph.D. degree:	\$2,600 to \$4,500

In view of current economic conditions and the competitive position of these four institutions in relation to other colleges, it is doubtful if this salary schedule is high enough to attract and hold competent persons for the state teachers colleges.

The foregoing paragraphs describe certain major policies and practices that are the same for each of the four institutions. Other uniform policies relate to refunds of fees, maximum student loads, transfers of students between institutions, admission with advanced standing, residence requirements, offering of extension courses, qualifications of faculty members, teaching contracts, and membership in the State Teachers Retirement System. The cooperative planning by the presidents of the state teachers colleges and the officials of the State Board of Education on major policies is to be commended. It makes possible the adoption of state-wide policies where that seems desirable. On the other hand, each of the institutions encounters problems peculiar to itself and is allowed a substantial degree of freedom in meeting such local or regional problems. The following paragraphs include some of the more significant information relating to the individual institutions.

The State Teachers College at Bowie received its present name and the authority to grant bachelor's degrees based on a four-year program in 1938. It has been in its present location since 1908 and is an outgrowth of the Baltimore Normal School founded about 1867. It is the only state teachers college for Negro students in Maryland. The College is ap-

proved and its graduates are certified to teach by the State Department of Education, but it is not accredited by either the American Association of Teachers Colleges or the Middle States Association of Colleges and Secondary Schools. Its investment in site, plant, and equipment is valued at \$556,164. There are three connecting buildings—a central building housing administrative offices, classrooms, library, demonstration school, dining hall, and men's dormitory; a dormitory for women; and a combination auditorium-gymnasium. The buildings are in fairly good condition. A tract of land of 187 acres provides sufficient area for expansion. Although residence facilities are available for 200 students, the enrollment in the fall of 1946 is only 131 students. The peak enrollment of 177 was reached in 1938. Since it is the only institution preparing elementary teachers for the Negro schools of the State, it draws its student body from and places its graduates in a larger number of counties than any of the other state teachers colleges in Maryland.

The elementary school on the Bowie campus, housing four rooms of children, grades one to four, provides an opportunity for junior students to observe classroom activities and to begin their practice teaching under supervision of the College staff. Five public schools within commuting distance of Bowie are affiliated with the College, and senior students do nine weeks of practice teaching in these centers, supervised by the local teachers and members of the College staff.

Infirmaries for both men and women students at Bowie and the services of a resident physician provide fairly adequate student health services for the student body at its present size.

In an effort to prepare teachers who will not only be skilled in their purely professional activities but who will also take a lively interest in the rural communities to which they go to teach, the College at Bowie provides a well-rounded program of extra-curricular activities. A small stock farm is maintained as a demonstration of one type of program which can effectively improve the economic status of Ne-

groes in the rural areas of the state. The educational leadership of the institution is in competent hands and those in charge of the College are energetically engaged in improving the quality of work being done.

The State Teachers College at Frostburg is located in Allegany County about eleven miles west of Cumberland. The original State Normal School at Frostburg was opened in 1902. In 1934 the curriculum was lengthened to four years and the granting of the bachelor's degree was authorized. In 1935 the name was changed to State Teachers College and a two-year junior college program was authorized as the first two years of the four-year curriculum. The College is approved by the State Department of Education, but has not been approved by the American Association of Teachers Colleges or the Middle States Association of Colleges and Secondary Schools.

The plant at Frostburg consists of five buildings, all interconnected, including an administration and classroom building, a science building, an auditorium-gymnasium, an elementary school, and a women's dormitory. These buildings are located on a small site of seven and one-quarter acres. Part of the site covers coal mines and is not able to bear any new construction. Cracks in some of the existing buildings are probably due to the settling of land over the mines. The residence hall is built to accommodate 50 students. The investment in the land, buildings, and equipment is \$484,268.

The College at Frostburg is primarily a local institution. Almost three-fourths (73.4 percent) of the student body in the fall of 1946 came from homes within fourteen miles of the campus. Slightly less than 67 percent came from Allegany County.

In addition to the four-year program for prospective teachers, the College at Frostburg offers a two-year junior college program for students desiring to transfer to other institutions, and an extension program for nurses in Cumberland. The junior college program overshadows the four-year program in the first two years. Fifty-seven percent of the 171 freshmen and sophomores are in the transfer cur-

riculum and 65 percent of the 130 freshmen are in that program. The extension program for nurses consists of courses in anatomy, chemistry, and psychology applied to nursing, offered by regular faculty members on the campus of the College and a course in sociology offered in Cumberland.

While the total enrollment at Frostburg increased sharply in the autumn of 1946 over the previous year (from 101 to 203), the prospect for sufficient graduates to meet the needs of the schools has not improved as much as might be expected, since 84 of the new freshmen are in the transfer curriculum and only 46 in the teacher education curriculum. Very few of the junior college students transfer into the teacher-education program. In the spring of 1946 none of those finishing the two-year program made such a transfer. During the one year of 1945-46, 101 new teachers were brought into the elementary schools of the three western counties, that part of the state especially served by the College. Yet in June 1946 only 16 persons were graduated as teachers ready to fill vacancies. While the demand for elementary teachers in that part of the state far exceeds the supply produced at Frostburg, the officers of the College are making definite efforts, in cooperation with the high schools, to induce qualified high school seniors to consider preparing themselves at Frostburg for the teaching profession.

Although new members of the faculty are being brought in from different places, there is still a large proportion of the faculty who are graduates of Frostburg, making for excessive inbreeding. There has in the past been no policy preventing faculty members from teaching in fields in which they have not had adequate training. Nor has there been any policy for keeping the teaching loads of faculty members from exceeding the level beyond which no really effective instruction can be secured.

If the state is to continue to maintain a teachers college in the far western part of the state, consideration should be given to the possibility of securing an adequate site, constructing adequate facilities, and furnishing sufficient, qualified staff members to carry out the purposes of the institution.

The State Teachers College at Salisbury was organized in 1924 as a State Normal School; it became a State Teachers College in 1935. It is located in the center of Wicomico County on the Eastern Shore. The College at Salisbury is approved by the State Department of Education. It is also accredited by the American Association of Teachers Colleges, but is not accredited by the Middle States Association of Colleges and Secondary Schools.

The plant at Salisbury consists of one large building with two wings. A center section includes the administrative offices, classrooms, gymnasium, auditorium, and a section of the women's dormitory. One wing contains another section of the women's dormitory, the library, a small theater, faculty offices, and the laboratory school. The other wing houses a large social room, the dining hall and kitchen, infirmary, guest rooms, and a newly arranged men's dormitory.

In addition to the regular four-year program, Salisbury State Teachers College offers a two-year curriculum in general education and two-year prejournalism and prelegal courses. It also offers one-year programs for students desiring to transfer into professional and preprofessional work in agriculture, commerce, home economics, dentistry, medicine, and nursing. Plans are being made, but are not yet approved, for offering two-year terminal curriculums in agriculture, business administration, home economics, industrial education, health and recreation, and one-year terminal programs in medical secretarial work and salesmanship.

More than three-fourths (76.2 percent) of the students at Salisbury come from the four southern counties of the Eastern Shore (Dorchester, Somerset, Wicomico, and Worcester). Almost half (45.7 percent) come from Wicomico County. The total enrollment in the fall of 1946 is 242, which represents a large percentage increase over the low figure of 120 in 1944-45, but is still below the peak enrollment of 273 in 1939-40.

Less than half (46 percent) of the total student body at Salisbury is in the teacher-education curriculum and less than one-fourth (24 percent) of the freshmen entering in the

fall of 1946 are in that curriculum. Although it is possible for students in the one-year and two-year programs to transfer into the teacher-education curriculum, experiences at Salisbury indicate that very few such transfers are made, and these few are offset by other students transferring in the opposite direction.

The campus school at Salisbury consists of four classrooms in which grades one to seven are housed, a small theater, and faculty offices. The enrollment in this school runs from four in the fourth grade to eighteen in the second grade; the school seems to have difficulty in obtaining enough children for effective demonstration or practice teaching situations. Off-campus practice teaching is done in six of the local elementary schools as well as the campus school.

The State Teachers College at Towson, which opened in 1866, is the oldest of the state institutions in Maryland for preparing teachers. It became a four-year degree-granting college along with the institutions at Frostburg and Salisbury in 1935. It is located on a beautiful site of eighty-eight acres in a suburb about six miles from the center of Baltimore. It has better facilities, in both buildings and equipment, than any of the other state teachers colleges in Maryland. A large administration building houses the offices, classrooms, laboratories, library, and auditorium. A separate building houses a well-equipped six-grade campus elementary school with classrooms, offices, library, and dining room. Two dormitories for women accommodate 300 students. A new gymnasium with facilities for both men and women students was completed in 1943. A separate heating plant serves the entire campus. The investment at Towson in land, buildings, and equipment amounts to \$1,656,658, or more than twice that of any of the other state teachers colleges.

The State Teachers College at Towson is accredited by the American Association of Teachers Colleges and is approved by the State Department of Education. It is not accredited by the Middle States Association of Colleges and Secondary Schools.

Since 1924, when the Training School for Teachers in Baltimore City was closed, the College at Towson has been preparing elementary teachers for both Baltimore City and the counties. In the year 1924-25 the total enrollment was 1,120, including 518 from Baltimore City and 602 from the counties. This figure declined to a low point of 237 (103 from Baltimore and 134 from the counties) in 1944-45, and then increased to 346 in the fall of 1946 in the teacher-preparation curriculum (137 from Baltimore and 209 from the counties) and 109 in the junior college program, making a total in 1946 of 455. This is the first year that the junior college transfer curriculum has been offered at Towson. Almost three-fifths (59.8 percent) of the white students preparing for elementary teaching in the state teachers colleges are at Towson. In the teacher-preparation curriculum 90 percent of the students are women, while in the junior college curriculum only 22 percent are women.

A systematic program for the recruiting of students for teacher preparation from Baltimore City has been worked out with the assistant superintendent in charge of elementary education for the City. Members of the Towson faculty visit high schools to talk with seniors and to confer with the high school guidance officers.

The practice teaching program at Towson is different for the Baltimore City students and the county students. Baltimore City students observe in the elementary schools of Baltimore and spend nine weeks of practice teaching in primary grades and nine weeks teaching in intermediate grades. They also visit other grades. The College selects the persons in the schools to act as demonstration and critic teachers, and the Board of Education of Baltimore pays those persons extra compensation. While they are doing practice teaching, the students return to the College once a week for a two-hour conference period in the curriculum laboratory. County students do their observation in the campus elementary school and in one of the Baltimore schools. Half of their practice teaching is done in the campus school and half in elementary schools in the counties.

The College pays the critic teachers in these county schools \$200 during their first year as critics and \$300 thereafter.

The faculty and administration at Towson have developed a well-organized counseling system. Each student has a faculty adviser. Freshmen are assigned advisers from among a group of faculty members interested in counseling work. Each upperclassman selects his own adviser. About 90 per cent of the faculty act as advisers. Freshmen advisers have an average of eighteen advisees while upperclass advisers have from twenty to twenty-two advisees each. These advisers help students with study problems, choice of electives, and other problems related to academic work. They also interview and offer guidance to all students leaving the College. Instructors cooperate with advisers by forwarding comments to the advisers concerning the progress students are making in their courses. Cumulative personnel records are kept for guidance purposes for all students. The advisers for the new junior college students are a separate group of faculty chosen for their particular abilities and interests. This personnel and guidance program at Towson is the most thoroughly organized program of its kind in any of the state teachers colleges in Maryland. In size, facilities, and in making preparation of teachers the major function of the institution, Towson also ranks at the top of this group of four colleges.

Besides the four state teachers colleges there are three other state institutions preparing teachers. They are the University of Maryland, Morgan College, and Princess Anne College.

In the University of Maryland the function of preparing teachers for the public schools is assigned to the College of Education. The University as it legally exists today was formed in 1920 by a merger of an old "University of Maryland" located in Baltimore and an institution called Maryland State College at College Park. At present the main branch of the University is located at College Park. A university center is also maintained in Baltimore for professional work in dentistry, law, medicine, nursing, and pharmacy. The

College of Education also has a branch in the Baltimore center where it offers late afternoon and evening courses primarily for teachers in service and other employed persons. The College of Education is administered by a dean responsible to the president of the University.

The large majority of students in the College of Education are preparing for teaching in the secondary schools. The elementary-teacher education curriculum is described in the University catalog as being "open only to persons who have completed two- or three-year curriculums in a Maryland State Teachers College or other accredited teacher-education institutions whose records give evidence of ability and character essential to elementary teaching." Only 10 of the 539 persons preparing for teaching in the College of Education in the fall of 1946 are preparing for elementary teaching. The curriculum for persons desiring to be certified to teach in elementary schools is based upon the kind and amount of previous preparation the student has had. For students who enter with approximately three years (ninety-six semester hours) of advanced standing, the program for the degree includes two semester hours in professional courses, six hours in English, six hours in science, twelve hours in social science, and six hours of electives based on the needs of the student. Students who enter with approximately two years of college work take four hours in education, ten hours in English, ten hours in science, twelve hours in social science, and twenty-eight hours in electives approved by an adviser. These requirements provide for a minimum distribution among the major fields of knowledge and also allow for the possibility of having each student take additional courses selected on the basis of his previous preparation and his interests.

In the field of secondary school teaching the College of Education prepares students for teaching general academic subjects and also in seven specialized fields: art education, business education, dental education (a cooperative program with the School of Dentistry), home economics education (a cooperative program with the College of Home Eco-

nomics), nursery school education, industrial education, and physical education.

Morgan State College began as the Centenary Biblical Institute in 1867. The name was changed to Morgan College in 1890. A branch of the College was established at Princess Anne in 1886 but that institution was later taken over as a part of the University of Maryland. Another branch, established at Lynchburg, Virginia, burned in 1917. The College acquired its present site on the outskirts of Baltimore, within the city limits, in 1917. It became a state institution in 1939 and its name was changed to Morgan State College. The College is governed by a board of nine trustees appointed by the governor. The plant consists of two old classroom and office buildings which house classrooms, offices, a cafeteria, and the administrative offices except the president's office; a library built in 1938 which houses the library, faculty offices, and the president's office; three dormitories for women; a dormitory for men; and a stadium with adjacent playing fields. The campus includes a total of eighty-five acres and plans for future development, including several new buildings, are being made. No rooms are available for rent to students in the vicinity of the College, and public transportation to the College is not good, making it difficult for commuting students to reach the College.

Morgan State College is accredited by the Middle States Association of Colleges and Secondary Schools, but not by the American Association of Teachers Colleges. It is the only liberal arts college maintained for Negroes by the State of Maryland. While most of the students (70 percent) come from Maryland and more than 40 percent come from Baltimore, almost one-third of the student body comes from twenty other states and the District of Columbia. The total enrollment in 1945-46 was 1,119.

The curriculum at Morgan College provides a typical four-year liberal arts course with opportunities for students to major in biology, business administration, chemistry, economics, English, French, health and physical education, history, home economics, mathematics, music, sociology, and

Spanish, as well as in education and music education. Of the 84 graduates of June 1945, 46 (55 percent) majored in some branch of education, 37 with a general education major, 6 with a physical education major, and 3 with a music education major. The College has no laboratory or demonstration school so that all the observation and practice teaching must be done in the public schools of Baltimore City or of neighboring counties. Critic teachers are selected by the College and the public school officials and serve for one year.

In addition to preparing secondary school teachers, Morgan State College offers a program of extension courses in the evening in one of the high schools in Baltimore. These courses are designed primarily for elementary teachers who have not completed the work for their bachelor's degrees. This group constitutes almost a fourth (22 percent) of the enrollment during the regular year.

Princess Anne College began as a private academy in 1886 and a branch of Morgan College. In 1891 it began to receive a portion of the federal land-grant money coming to the State of Maryland through an arrangement with Maryland Agricultural College. The College was purchased by the state in 1935. It was a junior college for Negro students at the time, but in 1936 it began to offer degree-granting programs. It is administered by an acting dean (who has had that title for about ten years) and is under the jurisdiction of the president and the Board of Regents of the University of Maryland. The College is located at Princess Anne in Somerset County on the Eastern Shore, about ten miles from Salisbury. The site consists of some 300 acres, 15 acres of which are in the campus; 150 acres of land are under cultivation. There are six fairly substantial buildings on the campus: an administration, classroom, and office building; a science and agriculture building; a mechanic arts building; a gymnasium; a women's dormitory; and a dining hall. In addition there is a men's dormitory which is a serious fire hazard, and a few barns and other minor farm buildings.

Princess Anne College offers professional four-year programs in agriculture, home economics, and mechanic arts,

and also prepares teachers in these three fields. It also offers two-year programs in general education, farm operation and foremanship, institutional cookery, and building and plant maintenance. Extension courses in the name of Princess Anne College are offered in Baltimore by the University of Maryland. The lower division program includes the courses offered in the two-year transfer curriculum and also the basic courses for students going into upper division work in agriculture, home economics, or mechanic arts.

The total enrollment at Princess Anne College in the fall of 1946 is 159. Of this group 39 (25 percent) are in the two-year general education program.

In 1900 the Baltimore City Board of Education set up a training class for Negro teachers in one of the city high schools. Two years later this training class was converted into a normal department. In 1939 the State Board of Education authorized the Baltimore Board of Education to grant the degree of Bachelor of Science in education and the name of the institution was changed to Coppin Teachers College. The College is located in one of the elementary schools for Negroes in Baltimore. It is a single-function institution, its sole purpose being to prepare elementary teachers for the schools of the city. About 95 percent of the Negro elementary teachers in Baltimore come from Coppin College. The curriculum is entirely prescribed. Professional work starts in the freshman year. Forty-three percent of the total credits required for the degree are in professional courses, many of them in the kind of methods courses that are generally being abandoned by the better teachers colleges.

The enrollment at Coppin Teachers College has remained fairly even throughout the last ten years, ranging from 123 in 1945-46 to 168 in 1938-39. The number of students admitted is based on the best estimates of the number of graduates that can be expected to receive teaching assignments in Baltimore upon graduation. Admission is based upon high scholarship averages and ability to meet the physical requirements set by the Board of School Commis-

sioners of Baltimore. Entering students are also given psychological examinations and subject-matter examinations covering elementary and high school courses. Any deficiency in such examinations must be made up if the student is to remain in attendance. During the last two years all Coppin graduates have passed the examination given for certification to teach in the city schools.

The building in which Coppin College is located is a good elementary school building. There is no gymnasium. There is no well-equipped laboratory. The library is completely inadequate for a college program. There is an equivalent of only five full-time teachers in addition to the principal, who also does some teaching. The principal is jointly responsible to the Assistant Superintendent for Negro Schools and the Assistant Superintendent for Elementary Education. The Negro population in the vicinity of Coppin is growing to the point where additional elementary school facilities will soon have to be provided, either by the construction of a new building or by taking over some of the space now used by the College.

Conclusions regarding teacher preparation

Information presented in the preceding pages leads to certain general conclusions regarding teacher preparation in Maryland. One of the obvious deficiencies is the lack of any single agency for the determination of state policies with regard to teacher education in publicly controlled institutions. Any agency set up for such a purpose should establish cooperative relationships with privately controlled institutions engaged in teacher preparation, through a state-wide teacher-education council or by some other means.

Study should be given the question of whether the state needs three separate institutions for the preparation of white students for teaching in elementary schools. One of the state teachers colleges lacks national or regional accreditation. The total enrollments of all three combined are scarcely large enough to warrant the maintenance of more than one such institution. The location and facilities of these institutions,

which have been described in preceding pages, should be studied carefully to determine whether they are all needed.

The maintenance of a separate institution for the preparation of Negro teachers for the City of Baltimore is open to serious question. Furthermore, the policy of permitting the City of Baltimore to maintain a system of certifying its own teachers, independent of control from state sources, is questionable.

It should be the policy of the state to raise the requirements for admission to teacher-preparation curriculums as rapidly as possible, consistent with securing an adequate supply of teachers. Provision needs to be made to prepare a sufficient number of teachers of special subjects to meet the demands in the various fields in which such instruction is offered in the schools of the state. The advisability of extending the programs of the state teachers colleges to include preparation for junior high school positions needs full and sympathetic consideration. At present there is great need to recruit a larger number of young people who have the abilities required for success in teaching, and to induce such persons to enter upon the program of preparation for service in the schools of the state.

Medical Education ²

Teaching in early American medical schools was almost wholly on a part-time basis with meager compensation. As the medical sciences developed, these departments were in time staffed almost entirely on a whole-time basis with a minimum of part-time paid personnel. In recent years it has been found necessary that the clinical instruction of medical students be placed increasingly on a combination of whole-time and part-time paid basis. This, too, has come about in part because of the increasing complexities of medical practice and because of the more recent responsibility of educating graduate students (our future specialists), as well as undergraduates. The larger patronage of hospitals and the

² The section on medical education was prepared by a special consultant, Dr. William T. Sanger, president of the Medical College of Virginia.

increase in emergency work, incident to the industrialization of society and modern transportation with its hazards, have likewise made for the closer supervision and direction of the education of all students in clinical medicine. Thus, the very worthy tradition of the medical profession to accept responsibility for the education of future members of the profession, with little or no compensation, has by degrees broken down; it is now actually a handicap.

When it became necessary to pay laboratory teachers in medicine, this was often done by increasing student tuition fees. The University of Maryland School of Medicine cannot increase fees further, and inasmuch as its state appropriation from tax funds represents only a pittance, this Medical School now faces a crisis unless additional financial support is forthcoming immediately.

Just as the complexities of modern medicine have imposed new requirements in whole-time teachers, so also new requirements in clinical resources have been made mandatory; this means that more teaching beds are indispensable. Either the state must greatly expand the University Hospital or find teaching cases in existing hospitals. Fortunately, the latter are available at the City Hospital and Mercy Hospital provided paid teachers are made available for work both with undergraduate and graduate students. Thus the state, by spending relatively little money for personnel, can obviate the necessity of very large, immediate capital expense for hospital beds; this would seem to be Maryland's opportunity.

Medical research is by no means a "frill." Someone has called it "guerilla warfare against the unknown"; in many instances this is highly fruitful and benefits society as a whole. However, its benefits do not stop here; research is an essential experience for leaders, keeps them on their toes, makes them appreciative of the work of others, and gives them the zest which comes with discovery, even though the results may be negative. Research under way in a medical school has beneficial effects upon those who do not participate and gives indispensable opportunities for the few undergraduates and graduates who do participate in it. Medical centers can

hardly be self-respecting in these times without a measurable amount of sound, scholarly investigative work. Such activities for the most part can only be undertaken by those who can devote amounts of time beyond what the busy practitioner as a volunteer can afford to give on any continuing basis.

*Some pressing needs at the University of Maryland
School of Medicine*

No competent individual can argue that the University of Maryland Medical School can hold its own, to say nothing about advancement, unless large resources are made available to provide whole- and part-time teachers for its work at the University Hospital, at the City Hospital, and at Mercy Hospital. Such provision is considerably overdue; it is required both for undergraduate and graduate education, and its cost should be considered an ultimate saving against what would be required to provide about the same teaching personnel if the University Hospital were expanded at large expense to supply ample teaching beds at one place. This consultant can endorse without apology the Medical School budget that has been prepared for the next biennium. Requests also include additional teachers for the medical sciences and increased compensation for all personnel, as required to absorb rising living costs. It hardly seems necessary to justify item by item the requests of the next biennial budget of the Medical School. Assurance can be given that these requests, however, have been studied item by item by this consultant. One point might be emphasized: in establishing new departments—such as psychiatry with a hospital service appropriate to teaching requirements, as contemplated—and in replacing heads of departments, as is inevitable from time to time, it will usually be necessary to pick younger men who have not already developed practices (because older men cannot readily be moved from place to place); and it will be necessary to pay such men substantially on a whole-time or half-time basis, with the expectation of taking care of them in the future on one of the several bases generally followed in this country for financing clinical teachers.

The University Hospital currently makes small provision for the offices of clinicians. This problem will likely have to be faced in the future. If such office space can be provided in or adjoining a teaching hospital, clinicians can be more easily attracted either on a whole-time or a part-time paid basis, the latter spending the day within the institution, frequently devoting about one-half time to the institution and the rest of the time to seeing private patients under a plan of regulation agreeable both to the University and to the clinicians. Good housing for clinical teachers is essential to their routine work as well as to the care of private ambulant patients who may be seen by them. High-class hospital beds in sufficient numbers meet another essential requirement. The University of Maryland has a shortage of such beds.

In summary, the 1947-49 budget of the Medical School calls for twelve additional teachers for five major preclinical (medical science) departments, at a cost of \$26,675, and supplementary technical help for these departments in the amount of \$7,600; for eight of the more important clinical departments, twenty-one full-time, two half-time, and fourteen part-time clinical teachers at a cost of \$105,520. This last figure also includes their requirements for secretarial and technical help. Admittedly, this grand total of \$139,795 in requests for additional personnel is a sizable amount, but it should be viewed from the standpoint of a past-due undertaking and as a means of meeting immediately the obligation of the Medical School to stabilize and make more effective its instruction without at this time making large capital outlays. The other increases requested in the next biennial budget are accounted for on the basis of increased operating costs and the need of raising salaries and stipends to meet the present inflationary emergency.

To an outsider it is almost unbelievable that the great State of Maryland has so long delayed doing the basic things provided in the new budget and that the present state appropriation for medical education is but \$55,559 annually.

Great credit is due the medical faculty for its recent thorough study of the problems of the Medical School, which

was undertaken as a foundation to fair and defensible requests for financing medical education at the University of Maryland.

Physical expansion

In expanding the University Hospital for psychiatry, as planned, it is suggested that a detailed study of the future needs of the Hospital be made in order to prevent mistakes which can be serious. Looking ahead it seems necessary to envisage ultimately doubling, and maybe more than doubling, the present hospital by additions to the west. This would naturally take the form of another Maltese-cross type of structure when completed. Thus, in addition to psychiatry, beds for medicine and the medical specialties might be provided for, leaving the present University Hospital to the work of surgery and surgical specialties and perhaps obstetrics. This would no doubt call for increasing the present operating and delivery rooms. It does not seem to be necessary to go into detail here except to suggest proper study and the purchase of necessary land at the psychological moment. The University will face the housing of interns and residents outside of the Hospital in the future; the construction of an outpatient clinic building, as closely associated with the Hospital physically as possible; the enlargement of housing for nurses; a new library building; and more complete arrangements for clinical research, preferably on one of the floors of the hospital addition, or in the future clinic building, assuming the latter will be built in physical juxtaposition to the Hospital itself. It now seems that much of the clinical research of the future will involve the use of patients, which means that laboratories for this work must be readily accessible for patients, some of whom may be cared for and be under study within the clinical research area.

It is suggested that sufficient land be secured in the future, if possible, to make it unnecessary to build structures in such proximity as will tend to shut out light and air. As one looks around the medical center, he is impressed with the effect that could be achieved by the purchase of a considerable amount

of the dilapidated property in the neighborhood. The old buildings might be removed and ample parking space provided until such time as the land area will be required as building sites.

Need for the Medical School

The Medical School of the University of Maryland, continuously in operation for 139 years, has been so useful to the state that it deserves full consideration of its present status and future opportunities. In 1940-41, 54.5 percent of the physicians practicing in Maryland were graduates of the University of Maryland Medical School. To meet adequately the future demands for practitioners, it is estimated that 100 students must be graduated annually. This cannot be done safely either with the present staff or with the present clinical resources. The next budget does make initial provisions for enlarging enrollment to 98 freshmen and consequently more graduates. Additional resources will be required in subsequent years but on a more modest basis than those for the immediate future.

The need for the continued maintenance of the Medical School cannot be determined solely by objective factors. It is true that Maryland in 1940 rated third among the states in the ratio of physicians to population—161 per 100,000 as compared to 125 per 100,000 population as an average for the nation. In this ratio Maryland was exceeded only by New York and Massachusetts. But the attempt to argue abandonment of state-supported medical education in Maryland on the basis of the ratio of physicians to population is futile for three primary reasons.

(1) The counties of Maryland, with over half the state's population, now suffer from a shortage of physicians and especially from poor distribution of those physicians; only the City of Baltimore, largely because it is a great medical center, saves the state from a serious doctor shortage. If, in these circumstances, more than one-half the physicians of Maryland are furnished by its University Medical School, what source of supply can furnish the physicians needed by

the state if the University of Maryland Medical School should be abandoned, especially at a time when the demand for medical care is rising at an unprecedented rate all over the country? The Johns Hopkins Medical School, a national rather than a local institution, today graduates about twenty fewer young doctors each year than the University of Maryland School of Medicine.

(2) If the counties of Maryland are to realize medical care on a well-distributed basis, hospitals and health centers appropriate to population density must be built, staffed, and operated at a high level of performance. The Hill-Burton bill recently enacted suggests the framework and provides some financial aid for this undertaking (one-third of the cost of construction). This program lays a new and continuing responsibility upon state-supported medical schools (to an extent which most schools hardly realize) because state-supported medical schools are subject to the will of the people to a degree that endowed medical schools are not. This new function for medical schools is so important that complete discussion would involve many pages. So much has been written on this subject of late, however, that it is hardly necessary to go into detail here. Some states without medical schools are today considering their responsibility for medical education primarily on two counts—that of setting up a medical school as the capstone of a state-wide, locally controlled, hospital system with the medical school serving as the integrating agency, and also that of meeting the demands for increased personnel of the twenty-odd types required for hospital and health center operation.

(3) In addition to turning out large classes of physicians with undergraduate education, the University of Maryland School of Medicine carries the heavy responsibility of preparing on a graduate basis the specialists needed by the state. This is a new responsibility which has come to medical education within approximately twenty-five years; it cannot be abandoned.

Medical schools without exception limit enrollments, due in part to the individual work required in the clinical years.

The average layman does not understand why medical schools cannot readily be expanded like other professional curriculums to take care of the pressure of enrollment. In normal times a high percentage of students applying for admission to medicine cannot be accommodated. In the face of past experience and in the light of the present mounting pressure of applicants to study medicine, Maryland certainly would find insuperable difficulties in securing admission for some ninety students of medicine, now received at the Baltimore school, in other institutions. Besides, the cost of medical education is so high that it is doubtful public policy to expect other states to assume this burden of medical education without suitable reimbursement. Furthermore, to send students out of the state for medical instruction decreases the chances of their returning for practice to the home state. The community in which the internship and the residency are completed is another powerful factor in determining the location for practice. Baltimore's contribution in this direction is enormous in its service to Maryland. Without its state Medical School, Maryland, it is believed, would suffer irreparably.

Reference is here made to Publication No. 40 by the Maryland State Planning Commission entitled *Medical Care in the Counties of Maryland* and to the need for extending this study both for the counties and for the City of Baltimore, in order to secure a more complete appraisal of the medical service needs of the State of Maryland. The hospital survey required under the Hill-Burton act, which is intended to furnish a master plan for hospitals and health centers in order for the state to qualify for public funds, should constitute another source of information as to the state's need for health service. Based upon all the immediately available evidence and the growing interest of the masses of our people, it is believed that Maryland, like every other state, will in the future be put to it to meet the expanding demands for medical care, assuming the continuance and strengthening of the Medical School as a factor to this end.

Future responsibility for medical service

It has come to be a truism that modern medicine cannot be practiced at the crossroads. Thoroughly trained modern physicians require the resources supplied by health centers and hospitals. If any state during the next decade expects to secure a reasonable distribution of medical care, a program of hospital construction, coordination, and integration must be consummated.

When it is pointed out that the hospitals of Maryland outside of Baltimore are not approved either for internships or residencies, it is immediately obvious to the informed that Maryland cannot expect to reach the level of medical care which the public is increasingly demanding without, first, the functioning of larger hospital units outside of Baltimore, and, second, without tying such hospitals into a medical center such as that of the University of Maryland for consultative service, postgraduate education, even to technical personnel, and many advisory services varying with local conditions.

When outlying hospitals can meet modern-service responsibilities, the too-great concentration of practitioners in Baltimore will come naturally to an end. At present when a young graduate wishes to remain in Maryland before he is eligible to take his specialty board, the only place in Maryland he can practice under the required supervision is in Baltimore. Here the number of hospital beds is already overtaxed, but many of the patients who come to Baltimore could, and should, be taken care of in their home communities, if proper facilities and adequate medical personnel are made available there. It is not within the scope of this memorandum to dwell upon this situation; it is pointed to chiefly as an opportunity for the University of Maryland Medical School to give the kind of leadership which the state has a right to expect and the School is willing to give, provided financial support from the state is sufficient to make this possible. To turn out additional medical graduates alone, it should be emphasized, will not solve this problem. It could easily result in further concentration of medical activities of the state within Baltimore.

Health problems are primarily local. Local communities must be educated to realize their responsibilities in this regard and to assume them; this not infrequently requires guidance and leadership from outside, and in this respect the University of Maryland Medical School and Hospital have a challenging opportunity.

Education in Nursing ³

Maryland, according to the 1940 census, ranks high in the ratio of nurses and student nurses to population. Too much comfort should not be found in this pre-war situation. Maryland is reported as having twenty-three schools of nursing, fifteen of them in Baltimore. All the eight schools outside of Baltimore can be rated as small hospital schools; most of them cannot contribute a large number of nurses for service in the state. Furthermore, some of them probably should be encouraged in the future to undertake programs for practical-nurse education rather than professional-nurse education. Generally speaking, Maryland faces two problems—strengthening certain existing schools of nursing and developing schools for practical-nurse education.

Too long have schools of nursing charged their budgets against the income from private patients although their work, if of quality, is really educational and should be financed as are other kinds of education, either from philanthropy, or from tax funds. While there is little precedent for it, we may be face to face with a new decision, either to put professional-nurse education on a sound educational basis with proper financing, or go without professional nurses as the smaller schools break down by reason of rising standards and inadequate financial support. Maryland might well consider supporting from tax resources a few promising schools of nursing and encourage a sound program of practical-nurse education, with leadership furnished jointly by the State Board of Education and the faculties of the Schools of Medicine and Nursing of the University, with the cooperation of

³ The section on education in nursing was prepared by a special consultant, Dr. William T. Sanger, president of the Medical College of Virginia.

the Maryland-District of Columbia Hospital Association. Here quick action seems to be imperative. The high marriage rate among graduate nurses, the enlarging opportunities for employment in governmental service, in industry, and otherwise, coupled with increasing demands for nursing service, suggest that this country is facing a crisis in a shortage of nurses, particularly when the country taken as a whole is now matriculating only about one-half the usual number of student nurses.

Engineering Education

The state contributes to the support of two schools of engineering, one at the University of Maryland, and the other at Johns Hopkins University. Each of these schools is now crowded far beyond normal capacity, so that duplication in services is scarcely an issue. The University of Maryland has well-developed plans for moving the entire engineering-education program to a new location on the College Park campus and is expanding the program greatly, especially in the field of aeronautics. For this latter development, private funds in substantial amounts have been provided, although considerable supplementation from state funds will be required.

Both the Johns Hopkins University and the University of Maryland programs have been given the highest possible accreditation by national authorities in the field of engineering education. Substantial programs of research are being conducted in engineering at the University of Maryland. Some of the research and investigation is being done in cooperation with various outside agencies. A fairly extensive program of graduate work in engineering is developing.

The survey staff sees nothing to be disturbed about in the fact that the State of Maryland supports two engineering colleges. At present, certainly both of these are needed; both are doing excellent work and are serving the state effectively. There can be no question about the desirability of continuing the adequate support by public funds for development in engineering education at the University of Maryland. Whether the state should continue to support the Johns Hopkins University School of Engineering must be determined in terms

of a general state policy with respect to the wisdom of providing public funds for educational programs in institutions which are not under public control.

Suggestion has been made to the survey staff that the projected development of engineering education on the new location at the College Park campus should be abandoned, and that instead the University of Maryland School of Engineering should be established in the Baltimore area where it would be readily accessible to the large industrial population of the metropolitan center. In the judgment of the survey staff this would not be a wise move. In the first place, engineering education must be developed in close connection with strong departments of science and liberal arts subjects. In the second place the figures previously given for the geographical distribution of the students in the College of Engineering of the University of Maryland show that large numbers (36 percent of the total enrollment) now come from the Baltimore area. With respect to the location of its University School of Engineering, the State of Maryland is much like the majority of the states in not having the school situated in the largest population center. It would seem that a large part of the needs of the Baltimore area for education in technical subjects might be met through a well-considered development of junior college and terminal curriculums, under the direction of the city school authorities.

LIBRARIES

A modern institution of higher education must have an adequate library organized for effective service to students and faculty members. Certain objective factors may readily be used in determining the adequacy of a college or university library. First of all the institution must have a satisfactory stock of books. It must subscribe to the scholarly periodicals that are useful in instruction and research. There must be an adequate budget for the purchase of library books, both to keep abreast of new publications and to fill in gaps that always arise from failure to purchase enough books as they are currently published. The library must be provided with an

adequate staff for the technical processes that are necessary for the effective use of the library materials.

In evaluating the libraries of the Maryland institutions, use has been made of the techniques developed by the North Central Association of Colleges and Secondary Schools. As previously explained, the use of this method of evaluation permits comparisons between the Maryland institutions and the general status of the libraries in the accredited colleges and universities of the Midwest.

The evaluation of the holdings of a college or university library presents a difficult problem. It has long been recognized that a mere count of the number of books on the shelves has little significance, because a small number of well-selected books may oftentimes be more useful than a much larger collection that contains a great deal of dead wood and useless materials. The North Central Association has developed a checklist by which it is possible to sample the holdings of a college or university library and to determine the relative adequacy of the collection for the kinds of subjects taught. In administering this checklist, the holdings of the library are sampled in the fields in which instruction is offered in the institution. It is possible in this way to compute a percentage figure which indicates the relative adequacy of the book collection for the kinds of subjects taught in the college. A similar checklist has been devised by the North Central Association for evaluating the extent of the periodical collection in an institutional library. The periodical checklist is relatively complete and does not utilize the sampling method used for the list of books. In the present survey all the state-supported institutions in Maryland were asked to indicate the titles of books and periodicals on the North Central checklists which they have in their libraries.

Another useful measure of the library is the amount of money spent for library books. Since the amount may vary considerably from year to year in a given college, the figure used is the average annual expenditure for the past five years.

The final measure for library adequacy used in this survey relates to the annual expenditure for salaries of library staff.

The amount needed for this purpose varies to some extent with the size of the institution, particularly in institutions with more than 500 students enrolled. For that reason the expenditure is expressed as an amount per student. Previous investigations have shown that up to the limit of 500 students the requirements for library staff are approximately the same, no matter how small the enrollment. In computing the salaries for library staff, the divisor is, therefore, never less than 500, even though the actual enrollment may be smaller than this figure.

The four measures of library adequacy in the Maryland institutions of higher education are presented in Table 48. The first two columns, dealing with holdings or books and

TABLE 48

LIBRARY HOLDINGS AND EXPENDITURES FOR LIBRARY BOOKS AND STAFF IN
THE MARYLAND INSTITUTIONS OF HIGHER EDUCATION

Institutions	Percentage of Books on N. C. A. Checklist Held by Library	Percentage of Periodicals on N. C. A. Checklist Held by Library	Average Annual Expenditure for Library Books	Annual Ex- penditure per Student for Library Staff Salaries
University of Maryland.....	67.0	80.5	\$18,923	\$ 8.02
Morgan State College.....	36.8	27.8	1,921	10.00
Princess Anne College.....	1.5	7.1	380	4.44
Frostburg State Teachers College.....	27.2	30.1	804	16.71
Salisbury State Teachers College.....	19.8	24.7	470	9.23
Towson State Teachers College.....	28.1	32.4	1,419	15.80
Coppin Teachers College.....	3.2	9.1	300	.....
Bowie State Teachers College.....	18.5	29.8	1,644	5.81
St. Mary's Female Seminary.....	8.3	8.0	82	4.44
Johns Hopkins University.....	78.5	90.4	7,831	.....
St. John's College.....	25.1	23.5	1,366	22.32
Washington College.....	30.3	34.4	1,799	5.34
Western Maryland College.....	32.4	39.6	1,953	5.86

periodicals, represent the situation in autumn of 1946. The expenditure for library books shown in the third column is the average for the five years 1941 to 1946. The figures for library staff salaries are for 1945-46.

It is not to be expected that any institution will have 100 percent of the books on the checklist. Both Johns Hopkins University and the University of Maryland rate in the highest

10 percent of midwestern accredited institutions in the extent of their library book holdings in the fields in which they offer instruction. Morgan State College has library book holdings that are slightly above average for the midwestern accredited institutions. None of the other Maryland state-supported institutions comes up to the average of the institutions of the Midwest, although Western Maryland College is only slightly below that average.

The tabulation shows that the libraries at Princess Anne College, Coppin Teachers College, and St. Mary's Female Seminary have extremely weak collections of books. Coppin Teachers College has practically no library at all when judged by college standards; it rates slightly higher in the table than the Princess Anne College library because of the relatively narrow curriculum at Coppin Teachers College as contrasted with the broad fields of subject matter which Princess Anne College attempts to cover. The Princess Anne College library is extremely limited for an institution which has responsibilities for the widely varied fields of study that must be represented in a land-grant college. Although the library at St. Mary's Female Seminary is also relatively weak, the fact that only junior college studies are offered makes the situation there less serious than at the degree-granting institution.

The book holdings at each of the state teachers colleges fall in the lowest third of accredited midwestern institutions. The libraries at Bowie State Teachers College and Salisbury State Teachers College are especially weak. St. John's College reports extremely limited holdings for a liberal arts college library; perhaps the curriculum and instructional methods at that institution require less use of extended library resources than traditional academic programs require.

The periodical subscription lists of the Maryland colleges show approximately the same situation as the findings from the checklist of book holdings. The Johns Hopkins University and the University of Maryland both rate in the highest 10 percent of midwestern accredited institutions on this point. Western Maryland College rates slightly above the

average, and Washington College rates only slightly below the average of the midwestern accredited institutions. These are the only Maryland institutions that rate in the upper two-thirds of accredited midwestern colleges and universities with respect to library periodicals. As in the case of library books, the lists of periodicals at Princess Anne College, at Coppin Teachers College, and at St. Mary's Female Seminary are extremely limited. St. John's College rates the lowest of any of the degree-granting institutions for white students. Morgan State College has a relatively limited subscription list of periodicals. The four state teachers colleges also rate low on periodicals in their libraries, and the Salisbury State Teachers College is particularly poor in this respect.

A satisfactory library can be built up only through regular purchases of books and other materials. The extent to which a library is supported by regular annual budgets for book purchases, therefore, becomes an important measure of its adequacy. The third column of Table 48 shows that there is a wide range among the institutions in the extent of the support given library book purchases. The University of Maryland has devoted a commendable amount to this purpose. Being a relatively young institution, it is doubtless under the necessity of making a good many purchases to build up its collection of older publications, in addition to keeping up with the current production of books that are necessary in a university library. With its wide scope of courses, and its large student body, the University is certainly justified in maintaining an unusually large budget for library book purchases for a number of years in the future.

Expenditures at Johns Hopkins University, while substantial, seem relatively small for an institution which emphasizes graduate instruction. Morgan State College, Washington College, and Western Maryland College all spend for library books approximately the average amount spent by midwestern accredited institutions. Towson and Bowie State Teachers Colleges both have been spending substantial amounts for library books, though somewhat less than average midwestern accredited institutions. At Salisbury and

Frostburg State Teachers Colleges the support of the library has been extremely meager. At the three other institutions—Princess Anne College, Coppin Teachers College, and St. Mary's Female Seminary—library book purchases have approached the vanishing point.

The survey staff must advise caution in the use of data for book purchases as obtained from some of the institutions. With the exception of the University of Maryland, none of the state-supported institutions maintains a financial-accounting system which permits the immediate derivation of a figure for amount of book purchases. In some of the institutions the survey staff was given only estimates, and these may have been incomplete. As pointed out in a previous chapter, it is unfortunate that the accounting system required by the state does not follow standard practice in providing for the reporting of expenditures in standard categories, so as to provide the kind of information useful in administering an institution and in evaluating its program.

The expenditure per student for library staff salaries seems rather high at certain of the institutions. In every case the high figure is the result of a small enrollment. As previously explained, the divisor used in obtaining the expenditure per student is never less than 500, so that in most of these institutions the figure would be even higher if the actual student enrollments had been used. A small institution must nearly always spend a large amount per student for library staff salaries if adequate services are maintained. At none of the Maryland institutions is the library overstaffed or are library staff members overpaid for their services, though at six institutions the expenditure is well above the average for midwestern accredited colleges. The relatively high expenditure in these colleges is a part of the price the state is paying for the maintenance of small institutions.

Coppin Teachers College had never employed a librarian until a week or two before the visit of the survey staff; consequently the table shows this institution spends nothing for library salaries.

Coppin Teachers College has not been provided with anything like the kind of library services expected in a modern institution of higher education. Expenditures for library staff salaries at Princess Anne College and St. Mary's Female Seminary are also extremely low, especially when it is remembered that these are small institutions which normally would have to spend much more than the average in order to maintain adequate library service. Washington College also supplies a meager amount for library staff salaries in comparison with the usual situation in institutions of its size.

During the visit to the institutions the Director of the survey spent some time in the libraries discussing problems with librarians and looking over the book collections. The impressions gained from these visits confirm completely the interpretations given to the statistics regarding the general adequacy of the libraries and their services. In some of the institutions inadequacies seemed to be due in part to a lack of realization or appreciation on the part of faculty members and administrators of the need for extensive library services in a modern instructional program. The greatest part of the deficiency, however, is attributable to inadequate appropriations for the purchase of books and periodicals and for library staff salaries.

To some extent the state's system of centralized purchasing has worked a hardship in the acquisition of needed library materials. There would seem to be no advantage whatever in routing book purchases through a central state purchasing office, so far as purchases are concerned. The present system results only in delay and inconvenience with no corresponding gains whatever.

At many of the institutions library services are handicapped by inadequacies in the physical plant. Morgan State College has an excellent library building, but this is the only state-controlled institution that has anything like adequate quarters for its library. The library building at the University of Maryland has been outgrown, and there is urgent need for a new library building there. At none of the other state-supported institutions is there a separate library

building; in each case the libraries are housed in sections of general buildings which were never designed originally for library purposes. Perhaps the need for a new library building is more difficult to dramatize and emphasize than the needs for dormitories or gymnasiums or other structures whose functions are more readily understood by the general public. In general, however, the provision of adequate housing for the library will do more to improve the instructional program of an institution lacking such facilities than the same amount of money spent on almost any other type of construction.

STUDENT PERSONNEL SERVICES

It is well recognized today that students require more than classroom instruction and academic assignments for their all-around development. Most colleges and universities provide a whole series of services to students outside the classroom and laboratory activities of the curriculum. These services, commonly known as the student personnel program, have been proved to be very important in the wholesome development of young people who attend colleges and universities.

All the state-supported institutions in Maryland have given recognition to the needs for student personnel services. The development is approximately typical of what one would find in the average college and university. The smaller colleges rely to a considerable extent on the close contact that is possible between the instructors and students and do not have as much of a formal organization for student personnel services as is necessary in the larger institutions. One of the outstanding developments in the student personnel programs is found at Towson State Teachers College, where the Registrar, who has had special preparation for this field of activity, has organized an extensive program of counseling and advisement services.

Problems lying in the field of student personnel services were discussed extensively with the officers of the institutions at the time of the visits of the survey staff. For that

reason no attempt is made in this report to comment at any great length on the various provisions set up in each of the institutions. Observation will, instead, be limited to a small number of general problems.

All the state-controlled institutions, with the exception of St. Mary's Female Seminary, report that they carry on an active program for soliciting prospective students. As long as this recruiting service is designed merely to obtain for the institution the type of students it is best equipped to serve, it is praiseworthy. Perhaps in Maryland, where young people in the past have not attended college as extensively as in most other states, there is an unusual reason for some sort of service which will call to the attention of every high school graduate the facilities afforded in the state institutions of higher education.

The procedures governing the admission of students in Maryland are in line with those that have been followed in most institutions elsewhere in the country. The Maryland colleges, however, do not make extensive use of factors other than high school graduation and the high school record in determining fitness for entrance into college. Most of the Maryland institutions give extensive tests to their freshmen after they have registered, but the results from these tests are not available in time to advise students either about the wisdom of going to college in the first place, or about the choice of subjects to be carried in the freshman year. A state-wide plan of testing is used in some states to provide supplementary information about the qualifications of high school seniors. This is valuable for determining fitness to enter college and to undertake particular special programs of study. A state-wide testing plan might well be developed for Maryland through the state Department of Education. The present scholarship examination could be organized in such a way as to provide an appraisal of the characteristics of all high school graduates who expect to attend college.

All the institutions report that they have set up counseling services covering the usual areas of student needs. Observations at the institutions indicate considerable variation in the

effectiveness of the services. In order to maintain a sound program of counseling, well-qualified and professionally prepared personnel are required. The direction of a counseling system cannot safely be entrusted to amateurs. Not all of the Maryland institutions have well-qualified and professionally prepared personnel officers.

Financial assistance to students is available in the form of loan funds at practically all the Maryland institutions. The amounts available in this form, however, are small. Under present economic conditions there is little demand for assistance to students in the form of loans, but in times of depression a student-loan fund provides an excellent method of assisting students to remain in college.

Scholarships other than those provided through senatorial appointments are very limited in the Maryland institutions. None of the state teachers colleges except Towson has any funds for scholarship grants. At the other institutions there are small local funds available for scholarship purposes. Most of these funds have been contributed by alumni or other interested community or industrial groups. At the University of Maryland certain scholarship awards in the form of remission of tuition are granted by the faculty.

All the Maryland institutions recognize the necessity of maintaining health services for students. Facilities for such services are limited at most of the institutions. One of the best programs of student health services was found at Bowie State Teachers College, where a regular physician and a dentist are employed and a nurse is on duty at all times. Most of the smaller colleges do not have a regularly appointed physician for the student health service but depend on calling in a local doctor when some emergency arises. In some cases there is not even a qualified nurse available for the care of student health.

Several of the institutions lack suitable infirmary facilities. Where these are provided in the smaller colleges, they generally consist only of a room or two in a dormitory. The state teachers colleges are particularly deficient in infirmary facilities for men students. The University of Maryland has

a well-developed student health program. Its infirmary facilities, however, are inadequate for the present enrollment, and a new and larger student infirmary is one of the important plant needs at this institution.

There is a general lack of student clubhouse facilities in the Maryland institutions. In several of the colleges one or more rooms have been set aside as lounges for commuting students. Dormitories customarily contain some social rooms. But the kind of development that characterizes many modern university and college programs, where student union buildings are featured as a center for social activities, are not found in the Maryland institutions. Facilities of this sort can be provided on a self-financing basis by charging students a fee for their support if the state is unable to provide the money necessary to finance the needed plant development.

Most colleges and universities in the United States have found it advisable and necessary to operate a bookstore where students may purchase textbooks and other supplies. In some of the Maryland institutions there is no bookstore, and in others the arrangement is very rudimentary. A student bookstore, in addition to providing for the purchase of books and supplies, can serve a useful function in maintaining a book rental service. Several of the Maryland colleges provide a sort of textbook service to their students through their libraries; it is much better to set up this as a rental service and to manage it through the bookstore.

ADMINISTRATIVE ORGANIZATION

The time available for this survey did not permit a detailed examination of the internal administrative organization of the Maryland institutions. This report is, therefore, limited to a few observations.

The patterns of administrative organization in the Maryland colleges all provide for the usual array of executive officers. Princess Anne College, however, is operated as a branch of the University of Maryland and by reason of that fact does not have the full complement of administrative

officers. The local official responsible for the institution is given the title of dean. The person who has held this responsibility for the past ten years, however, has been named only as acting dean for that entire period. It would seem highly advisable not to keep the status of the chief local administrative officer at Princess Anne College in doubt over such a long period. If he is never to be made the actual dean, steps should be taken at once to obtain a properly qualified person for that position. It is both unfair to the man and to the institution to keep him so long on the status of acting dean. Somewhat similarly, the business office at Princess Anne College is operated only as a subsidiary of the main University business office at College Park. The registrar's office at Princess Anne, however, is quite independent of the registrar's office at College Park. In general, the arrangements for the division of authority between the University of Maryland and the branch at Princess Anne are open to many criticisms. If the present arrangement for control is to be continued, there should be a careful study of the administrative organization necessary for the effective operation of the institution at Princess Anne.

In the State Teachers Colleges and St. Mary's Female Seminary there is the general practice of assigning the business management and the registrar's functions to the same person. This has probably seemed necessary because of the small size of these institutions, which would make it uneconomical to employ two well-qualified persons for full-time service as business manager and registrar respectively. The present arrangement in the Maryland teachers colleges, however, is very unusual among American colleges and universities. Observation of the operations of this plan in the Maryland institutions would not lead one to recommend it elsewhere. The two positions require quite different types of abilities, and it is seldom that one person can be found who combines the characteristics necessary for effective service in both the registrar's office and the business office. A better arrangement in the small colleges might be to assign the registrar's responsibilities to a faculty member who would devote part

time to that service. With a competent clerk, the duties of the registrar's office should then be performed well, provided the person named as registrar is able to obtain special preparation for that position at one of the universities in the country where it is available.

At the State Teachers Colleges and at St. Mary's Female Seminary the business functions are carried on in only a rudimentary fashion. So much of the responsibility for the financial control of these institutions is lodged in the various state offices that the officials in the institutions themselves have little more than clerical responsibilities with regard to business affairs. In the judgment of the survey staff, the programs of the institutions would be improved by lodging more financial responsibility locally, with provision for adequate personnel to carry such responsibilities. This would probably be more expensive than the present arrangement, especially in the small institutions, but it would result in a better job of administration.

At the University of Maryland the various offices of administration are not effectively coordinated below the level of the president's office. For example, there are at least three independent officers dealing with functions in the field of business and personnel employment. The student personnel services are scattered among a number of officers, each of whom is responsible to the president. There are a large number of academic units such as schools and colleges, with a dean in charge of each, who is responsible only to the president of the University. The various enterprises carried on in the City of Baltimore are set up under separate heads with no single coordinating officer located in the Baltimore center.

The present plan of organization at the University of Maryland results in what is technically known as too great a span of control in the president's office. In other words, too many people have to make direct contact with the president in order to get decisions on important matters. Such a plan of organization is characteristic of small institutions, where it often works reasonably well because of the relative sim-

plicity of the contacts that are involved. For an institution that has grown as large as the University of Maryland, however, it is extremely important not to overload the president with too many details. The approved arrangement is to provide not to exceed eight subordinate officers through whom all the operating units of a university may be responsible to the president. For example, it would be possible at the University of Maryland to set up one official who is responsible for all business affairs, another who would coordinate all student personnel services, another who would have charge of the activities in the Baltimore area; academic administration could be centralized through a dean of faculties. It is outside the scope of this survey to suggest the exact pattern of administration that would serve best the needs of the University. The present situation could be summed up by saying the administrative organization of the University of Maryland has apparently not evolved in a manner to correspond with the growth of the institution's operations. A university enrolling several thousand students cannot be administered through the form of organization that was suitable when it was an institution of a few hundred students.

Another condition that seems to be characteristic of almost all the Maryland state-controlled institutions is the highly centralized manner in which they are administered. Final decisions on even small details are customarily reached only by the president. Even in a small institution it is wise to share rather widely the responsibility for determination of policy and procedures. At some of the Maryland institutions the presidents are accustomed to consult the faculty in development of policy, but the general feeling is that ultimately decisions must be made by the president. For the most part, faculty members and even subordinate executive officers seem to feel that their functions are only advisory. As a result the executive officers tend to restrict their authority to what are essentially tasks of a clerical level. They seem to feel they have little or no authority to say "yes" or "no" finally without consulting the president.

Just why this centralization of authority in the president's office should have developed so universally in the state-controlled institutions in Maryland is difficult to discover. It is certainly not a part of "climate of opinion" in the Maryland population, for the four state-supported institutions that are not under state control all have relatively democratic and decentralized administrations, with a considerable degree of delegation of authority from the president to subordinate officers. Without attempting to explain why this situation in the state-controlled institutions has developed, the survey staff would suggest that at each of these institutions there be instituted a study to see whether or not it would be wise to delegate some of the detailed authority now residing in the president's office, and to assign certain of these functions to subordinate executive officers.

In so far as could be discovered, none of the state-supported institutions in Maryland has ever had an intensive survey of its operations by a competent outside staff of educators. Each of the institutions, without exception, would benefit by advice from such an analysis. One of the wisest purposes for which the state could appropriate funds to its institutions would be to provide them with opportunities to have a thorough-going survey by a group of qualified educators.

The present survey, as has already been stated, has had neither time nor opportunity to go into details with respect to the internal operations of the institutions. Enough has been found, however, to indicate the great value that would accrue to the institutions and to their services to the state through a comprehensive survey within each of them. A survey of this sort should not be imposed from without; rather the desire for it must originate within the institution. The leadership of the state can do much, however, to stimulate the authorities of the institutions to realize their need for such a survey and to provide funds necessary for carrying it on. Such a provision would be a most useful follow-up for the present state-wide survey of institutions of higher education in Maryland.

VI. PHYSICAL PLANT NEEDS IN THE STATE- CONTROLLED INSTITUTIONS OF HIGHER EDUCATION IN MARYLAND

The importance of adequate buildings and equipment for the efficient conduct of the program of any institution cannot be questioned. While physical facilities do not of themselves assure an effective educational program, the absence of needed facilities may seriously handicap or restrict otherwise good educational programs.

Education today, and certainly in the future, cannot be confined to "book learning." One of the great advances in education has been the emphasis on the importance of the student's contact with *things* as well as *ideas*. For example, the teaching of modern science requires far more equipment than was necessary years ago. Buildings and equipment which probably were adequate for the typical college of a generation past would be hopelessly inadequate to meet the needs today.

Are Maryland's colleges properly equipped to provide the educational programs which the state expects of them in the present and immediate future? This section of the report will attempt to answer this question.

The treatment in this chapter is limited to the institutions that are state-controlled. At times in the past the state has made appropriations for capital outlays to certain institutions that are privately controlled. Whether this policy should be continued in the state is a question discussed in another section of this report. The present discussion of plant needs assumes that if the state wishes to provide funds for buildings in privately controlled institutions it will do so outside the regular program of improvements at the state institutions.

CAPITAL IMPROVEMENTS, 1934-46

During the thirteen years from 1934 to 1946 the state provided the sum of \$4,411,069 for capital improvements in its higher educational institutions. As shown in Table 49, 75.5

percent of this went to the University of Maryland, 13.7 percent to Morgan College, and the remainder was divided among five other institutions.

The data of Table 49 are interesting, but it is not possible to interpret them in terms of relative need. The necessity for capital improvements from time to time is related in an important way to the trends in enrollments, but other factors also enter into the situation. A small institution having old and inadequate buildings may have a much greater need than would a much larger one with relatively new buildings. The

TABLE 49
STATE AID FOR CAPITAL IMPROVEMENTS, 1934 TO 1946

Institutions	Total from 1934 to 1946	Annual Average from 1934 to 1946	Percentage of Total from 1934 to 1946
University of Maryland.....	\$3,328,668.64	\$256,051.43	75.5
Morgan State College.....	605,104.76	46,546.52	13.7
Bowie State Teachers College.....	187,974.30	14,459.56	4.3
Frostburg State Teachers College.....	0.00	0.00	0.0
Salisbury State Teachers College.....	17,873.99	1,374.92	0.4
Towson State Teachers College.....	178,447.12	13,726.70	4.0
St. Mary's Female Seminary.....	93,000.00	7,153.85	2.1
Total.....	\$4,411,068.81	\$339,312.98	100.0

development of new educational programs in an institution will naturally affect the plant needs. Thus, the amount of appropriations for capital improvements in the past is not an index of the needs of the future, except to the extent that previous improvements may have provided sufficiently for the future.

The needs of the various institutions may be appraised to some extent by the analysis of their utilization of the space at present devoted to academic purposes. The following section presents such an analysis. Subsequently the conditions found in each college will be described, together with the improvements that seem necessary to provide properly for the present program.

UTILIZATION OF CLASSROOMS AND LABORATORY SPACE

As a part of the survey, data were collected from each of the state-controlled institutions showing the extent of the utilization of space in the autumn of 1946 for each classroom and laboratory in each institution. A complete schedule of use was obtained for each room showing the periods during the week when it was to be occupied and the number of students occupying it each period. From these data a calculation was made showing the extent of the utilization of the rooms.

As a basis for figuring utilization of classrooms and laboratories, a forty-four period week was taken. This has been looked upon as a reasonable standard in past years, though at present many institutions in other states and some of those in Maryland are operating on a longer week than this standard. Inasmuch as comparative data from other studies have been based on a forty-four period week, it has seemed best to use this figure in making the calculations for the Maryland institutions.

Two different measures of utilization have been calculated. The first shows the percentage of the total possible periods during the week when classrooms are used; this measure disregards the extent to which each room is used during the periods when it is occupied. The second measure takes into account not only the periods when the room is used, but also the number of students using it during each period when the room is occupied. For example, if a certain classroom is used for classes thirty-three periods during the week, its room-period utilization would be $33/44$, or 75 percent. If this room has a capacity of twenty-five students, it could care for a maximum of 1,100 student-sittings during a forty-four period week; if the sum total of student-sittings for this room is 440 during the week, the student-station period utilization would be 40 percent.

Table 50 shows a summary of the utilization of the classrooms and laboratory space for each of the state-controlled institutions of higher education in Maryland. St. Mary's Female Seminary was unable to provide this information, and

TABLE 50
UTILIZATION OF CLASSROOMS AND LABORATORIES IN THE STATE-CONTROLLED INSTITUTIONS

Institutions	Maximum Capacity of Rooms	Number of Possible Room Periods Each Week	Actual Number of Room Periods Used Each Week	Percentage of Room Period Utilization Each Week	Maximum Number of Student-Period Places Possible Each Week	Actual Number of Student-Period Places Used Each Week	Percentage of Student-Period Places Used Each Week	Number of Classrooms Overloaded Each Week
Bowie State Teachers College 7 rooms, gymnasium.....	337	352	109	31.0	14,828	2,570	17.3	none
Frostburg State Teachers College 13 rooms.....	487	572	240	41.9	21,428	4,482	20.9	6
Salisbury State Teachers College 8 rooms, gymnasium.....	524	396	171	43.2	23,056	4,559	19.8	19
Towson State Teachers College 22 rooms, gymnasium.....	964	1,012	325	32.1	42,416	7,107	16.8	none
Morgan State College 29 rooms, gymnasium.....	1,085	1,364	670	49.1	47,740	18,353	38.5	204
St Mary's Female Seminary* University of Maryland—70 rooms.....	.....	3,036	2,339	77.0	.....	.....	.....	.....
Princess Anne College 16 rooms, gymnasium.....	466	748	203	27.1	20,504	2,174	10.6	none

* No data furnished by the institution.

the University of Maryland provided only the data for room-period utilization, not for student-station utilization.

Previous studies indicate that a room-period utilization of 50 percent and a student-station utilization of 20 percent can readily be reached without undue crowding of facilities and without excessive complications of class scheduling. Utilization beyond these limits can usually be obtained only by extending beyond forty-four the number of periods in the week, or by overcrowding many rooms at the periods of peak loads, or by arrangements of the class schedule that may prevent many students from getting into the courses they need.

The data of Table 50 indicate that needs for additional institutional space are most acute at Morgan State College and the University of Maryland. This finding agrees with the observations of the members of the survey staff. The other institutions utilize their space about as well as the average American institution in normal times. In none of the other institutions would there be justification of expansion of the present academic space merely on the basis of the number of students served. Morgan State College now operates on the basis of a forty-four period week. Extension of the school day at this institution would not provide sufficient relief for the crowded condition imposed by present enrollments. The University of Maryland is utilizing many of its classrooms on the basis of a sixty period week, which is certainly the maximum that can be expected in an institution of its type.

It should be remembered that the foregoing tabulation relates only to space used as classrooms and laboratory space. The table does not indicate needs for dormitories, library, gymnasium, or other types of noninstructional space, nor does it indicate the quality of the space used. In two or three of the institutions there is justification for undertaking the construction of a science building because of the inadequacy of the present facilities for science instruction. These needs will be presented under the program of physical plant needs for each institution.

BUILDING NEEDS AT EACH OF THE INSTITUTIONS

The analysis of plant needs at each of the institutions has proceeded on the assumption that the institution would continue to be a part of the state's program in higher education and that the kinds of services rendered would continue much along present lines. To the extent that changes may be made in the nature of institutions or in the policy of continuing a specific institution as a part of the state system of higher education, the recommendations in this section would be inappropriate. The suggestions regarding plant needs are made without specific reference to authorizations for buildings or other projects that have not reached the state of initiating actual construction, or that have not actually been provided for financially. Where construction is now under way, the fact will be noted but no extensive support will be given for such a building, inasmuch as it may be presumed that the justification for such construction has already been made.

University of Maryland

The enormous expansion that has taken place in enrollments at the University of Maryland has made imperative a considerable increase in the physical plant at this institution. A large addition to the dining hall, an agriculture building, a classroom building, and some dormitories are at present under construction. The outstanding needs are for additional dormitories to care for the housing of students. At present the dormitories are occupied far beyond their normal capacity, and large numbers of applicants for dormitory rooms cannot be accommodated. The completion of the dormitories at present under construction will relieve the condition somewhat, but still further provisions are necessary.

The heating plant of the University is now severely strained to supply the service needed by the present physical plant, and the boilers have no reserve capacity. The heating plant will be inadequate to care for the additions to the plant that are in prospect. This would be an excellent time to move the heating plant to a new location where it would be close

enough to the railroad to permit the unloading of coal directly from the cars into bunkers near the boilers, thus avoiding the expensive trucking and rehandling of coal which is necessary at the present location. Although the University authorities have not suggested it, a utility tunnel system might well be considered as a possible future project.

The University badly needs a new library building. The present building is entirely too small, both for housing the book collection and for the use of the number of readers that would normally be expected in an institution of this size. The present building cannot be expanded economically, so the most feasible solution is a new library building. The present building can be used for other academic purposes when a new library is completed.

The University has already embarked on a large-scale project for the construction of a new group of buildings at the north side of the present campus, where engineering, chemistry, physics, and mathematics instruction and research will be centered. Some \$2,500,000 has been made available from private sources toward this construction, and a state allotment of \$750,000 has also been made. It is estimated that a total development will cost in the neighborhood of \$5,000,000 and that the state will need to provide an additional \$1,750,000 to finance the project. Engineering is one of the most rapidly growing fields of study in the University. The needs for education in engineering in the country are at present beyond the total capacity of the engineering colleges. The provision for additional facilities for engineering education at the University of Maryland would be sound public policy. When these buildings on the new location are finished, certain buildings now occupied on the main campus for engineering and related instruction can be utilized for other academic purposes.

The present infirmary at the University of Maryland is entirely too small for the number of students now enrolled. A new infirmary, large enough to care for needs of a student body of approximately 10,000, should be constructed. The present infirmary would continue to give excellent service

when converted to other uses. Consideration might well be given to the planning of the new infirmary in such a way as to fit in with general plans for the development of hospital facilities for the College Park community.

The facilities of the University of Maryland campus for student social activities are entirely too limited. Most institutions of this size have a student union building to house these activities which are an important part of the all-around development of the student. A student union building can be constructed on a self-financing basis by charging students a fee which is used to liquidate the investment.

The facilities for physical education for women are entirely too limited to meet the needs of the greatly increased enrollment at the University of Maryland. An extension of the women's gymnasium is needed to provide suitable housing for the program in physical education for women.

The University of Maryland is one of the few institutions of its size anywhere in this country that lacks a swimming pool. Instruction in swimming is important for personal safety and is widely recognized as a vital part of a well-rounded education. During the recent war the Navy, in allocating instructional programs to colleges and universities, had to insist that every institution which it used should have a swimming pool, so that every man in the Navy program could be taught to swim. It would be highly desirable for the University of Maryland to have a modern swimming pool, which should be arranged so that both men and women students could use it.

The building now used for agricultural engineering was originally built for NYA purposes and is not of a permanent nature. At relatively little expense this building could be made over into a permanent structure, thus providing effectively for the housing of one of the important elements in the program of agricultural instruction.

The University now has no laundry facilities of its own. The provision of a laundry building with modern equipment would result in considerable economy in the operating budget of the University.

Certain other building projects proposed by the University of Maryland can, in the judgment of the survey staff, be postponed until the biennium of 1949-51. The following discussion pertains to such projects.

With the developments of the engineering buildings on the north side of the present campus, it may be necessary to move the dairy and livestock barns and to provide a new building for instruction in these subjects. Certain greenhouses now located in the front yard of the campus could well be moved to a more suitable location. The University has plans for an interdenominational chapel; this is a worthwhile project, but it can possibly be postponed for a couple of years without serious inconvenience. In the biennium of 1949-51 a need will likely arise for the construction of still more dormitories, especially if enrollment trends continue according to present prospects. The completion of the engineering group of buildings probably cannot occur before the end of 1949, and some funds for that project could well be allocated in the biennium 1949-51.

Two or three building projects which the University authorities are advocating seem to the survey staff to need further study before provision is made for their financing by the state. Some of these might be undertaken in 1949-51 if they still appear necessary at that time, or further study might indicate a longer postponement. The construction of a system of utility tunnels has already been mentioned as one such possibility. The University has at present no auditorium large enough to seat the entire student body, and at some time in the future consideration might well be given to the construction of an auditorium that would seat possibly 10,000.

The present athletic field has a seating capacity for only a few thousand spectators. A full-sized stadium would be an excellent addition to the plant at the University, although the survey staff cannot give this project a high priority in view of the pressing needs for other facilities. Inasmuch as instruction in aeronautical engineering is being made a feature of the institution, it has been proposed that a large airport should be set up adjacent to the new campus. This

would undoubtedly be a useful adjunct to the program of research and instruction in aeronautical engineering; the survey staff, however, is of the opinion that the project needs further study before the state commits itself to the large capital investment that would be involved in the construction of a large airport adjacent to the University campus.

The following list summarizes the building needs of the University of Maryland as seen by the survey staff and sets up the list in order of the urgency of each project.

For the biennium 1947-49:

1. Women's dormitories to house 500 or 600 women
2. Men's dormitories to house 400 or 500 men
3. Heating plant
4. Library
5. Engineering group (including physics, chemistry, mathematics)
6. Infirmary
7. Student union
8. Addition to women's gymnasium
9. Swimming pool
10. Remodeling of agricultural engineering building
11. Laundry

In the biennium 1949-51:

12. Dairy and livestock instruction buildings and barns
13. Greenhouses
14. Interdenominational chapel
15. More dormitories, as need may appear
16. Completion of engineering group

Projects needing further study:

17. Auditorium
18. Airport
19. Stadium
20. Utilities tunnel system

The needs for additional buildings in the Baltimore center of the University of Maryland were not studied by the survey staff as intensively as the needs at the College Park campus or at the state institutions. The University did not furnish a list of plant needs at Baltimore in time for a thorough check to be made. The needs are listed below in the order suggested by the University. The survey staff has suggested that the final item on the list be postponed until the 1949-51

biennium. In fitting this list into the composite priority list in the state program, the survey staff has relied to some extent on the observations of the specialist who studied the Medical School for the survey. The following list is presented as the needs of the Baltimore campus:

In biennium 1947-49:

1. Psychopathic unit of University Hospital
2. New wing of University Hospital
3. Nurses home
4. Student activities building
5. Addition to dental and pharmacy building

In biennium 1949-51:

6. Central library

Princess Anne College

The land-grant college for Negroes at Princess Anne is operated as a branch of the University of Maryland. Princess Anne has a gymnasium and a women's dormitory, both of which are excellent. The administration and classroom building is of very good quality, and the building for industrial arts serves its purpose reasonably well. In almost every other respect the plant is sadly deficient. Some of the conditions in the physical plant at Princess Anne College are a disgrace to the State of Maryland.

The greatest need at Princess Anne is for a modern dormitory for men. The present building is a four-story frame structure which is an extremely serious fire hazard. It should be condemned at once as unsafe, both for the reason of the fire hazard and also because of inadequate sanitary conditions. The present dining hall and kitchen are very unsatisfactory. It should be possible to build a new dormitory for men and to combine with it a new dining hall and kitchen that would serve the entire student body.

Housing for faculty members is an urgent need at Princess Anne College. There are almost no accommodations in the neighborhood where Negro faculty members may live. A small investment by the state in building homes for faculty members at Princess Anne would pay good dividends in

greater efficiency in the instructional program. Such a project could be set up on a self-liquidating basis.

Although Princess Anne is a land-grant college for Negroes in Maryland, it is extremely deficient in the buildings needed for agricultural purposes. A dairy barn and other farm buildings, modern farm machinery and equipment, and a greenhouse for horticulture should be provided without delay in order that the program of instruction in agriculture may be maintained on a satisfactory basis.

The building at present used for instruction in science and agriculture is inadequate. It is only a part of a building, inasmuch as the appropriation for its completion was never made. The institution urgently needs a good science building, in which the classrooms and laboratories for agriculture could also be located.

The library at Princess Anne is small and needs to be greatly strengthened within the next few years. The space assigned at present for library purposes is not adequate, and it certainly will not care suitably for the needed developments in the library. For that reason a new library building seems necessary. When this is provided, the present library quarters can be returned to other academic uses.

The walks and drives at Princess Anne should be paved. At present the students must wade through mud and water during bad weather to get from one building to another. The cost for the paving would be a relatively minor item in the budget needed for the construction program at Princess Anne.

The following tabulation summarizes the plant needs at Princess Anne College for the biennium 1947-49, listed according to priority:

1. Men's dormitory, including a dining hall, kitchen, and food storage facilities
2. Housing for faculty (could be self-financing)
3. Dairy barn and other farm buildings
4. Science and agriculture building
5. Library
6. Greenhouse for horticulture
7. Paving of walks and drives, and landscaping

Towson State Teachers College

The Towson State Teachers College has one of the best physical plants of any of the state institutions. The site is well located, and the grounds are beautiful and spacious. The main building, erected in 1915, is well constructed and with few exceptions provides adequately for the present program. The building has poor artificial lighting throughout. If the present electrical circuits are inadequate to carry the load that is needed, they should be replaced with new circuits.

It would be advisable for the state to provide some housing for the faculty members at the Towson State Teachers College. These facilities could readily be set up as a self-liquidating project.

The library at Towson State Teachers College is unfortunately scattered through several different rooms on two floors of the main building. The charging desk is badly located at a point where it blocks the stairway and constitutes a hazard in case of fire or panic. It would be desirable to provide a new library building at Towson State Teachers College.

Plans have been considered at Towson State Teachers College for a swimming pool to be located on the terrace adjacent to the gymnasium. Some funds contributed by the alumni are available to assist in financing this project. A comparatively small provision by the state would make possible the addition of a swimming pool which would be very advantageous to the program of the Towson State Teachers College.

Towson State Teachers College has no dormitory for men. It does provide a few rooms where men are housed in certain buildings, but these quarters are entirely unsatisfactory. In view of the importance of attracting more men into the teaching profession, it would be desirable to have modern dormitory facilities for men at Towson State Teachers College. A large dormitory building is not needed at present; perhaps it should be constructed at first to care for about forty, with the plans drawn in such a way as to permit later expansion if that proves necessary.

The authorities at Towson State Teachers College are of the opinion that an extension is needed to the training school so that a kindergarten class can be instituted. It would, indeed, be desirable to introduce a kindergarten, so that teachers might be prepared for this type of educational service. At none of the state institutions is preparation now offered for kindergarten teachers. The survey staff is of the opinion that kindergarten facilities can be provided in the present training-school building at Towson State Teachers College. Extra sections of certain grades are now carried at Towson. If the policy were followed of maintaining only one section of each grade, the organization would still provide adequate facilities for demonstration and training-school purposes, and there would be plenty of room in the present building for a kindergarten class.

The following tabulation summarizes the plant needs at Towson State Teachers College, listed according to priority:

1. Faculty housing and housing for some other staff members
2. Library
3. Swimming pool
4. Men's dormitory

Salisbury State Teachers College

The State Teachers College at Salisbury is another institution which has a relatively new and complete plant. Its present needs for additional construction are small as compared with certain other institutions.

It would be advisable to finish the third floor of the present dormitory so as to provide additional rooms for men students at Salisbury. This would involve a relatively small outlay.

The recent construction of a new highway has changed the general approach to the campus of the Salisbury State Teachers College. It would be desirable to pave the roadway leading from the main highway to the campus. This would not require a large outlay.

A home for the president of Salisbury has never been provided by the state. This is a desirable facility, not only be-

cause it assists the institution to attract and hold a capable executive officer, but also because it provides a convenient center for social activities for students, faculty, and guests of the College.

The following list summarizes the building needs at Salisbury State Teachers College for the biennium 1947-49:

1. Complete third floor to provide additional dormitory rooms for men
2. Pave roadways
3. Home for the president

Frostburg State Teachers College

The plant at Frostburg State Teachers College is decidedly the poorest of any of the four Maryland institutions devoted to the preparation of teachers. The land on which the Frostburg State Teachers College is located is undermined, and the settling of foundations has opened up large cracks in the walls of some of the buildings. The campus is too small, and the possibility of extending it by purchases of adjacent properties does not seem bright. The best solution would undoubtedly be to move it to a location nearer to Cumberland, where the institution would serve a larger local constituency and where a larger and more suitable site could be developed. If the institution is to remain on the present site, there are a considerable number of plant needs which should be met in the near future. These are listed for the sake of the record.

The most pressing need at Frostburg is for a new science building. The present facilities for instruction in science are very inadequate. If a new science building were constructed, the space at present assigned to science could be devoted to other instructional activities.

The library at Frostburg State Teachers College is housed on the top floor of the main academic building. The space is entirely too small; and if the book collection grows as it should, the weight will put too great a strain on the frame of the building. The only solution seems to be a new building for library purposes. When this is constructed the present library can be devoted to other academic uses.

Frostburg State Teachers College has no dormitory for men. As noted in the case of other institutions, the desirability of attracting more men into the teaching profession suggests the provision of a modern men's dormitory.

The present kitchen is entirely too small, and the dining room is barely adequate. If a new dormitory for men is constructed, it should also contain a complete kitchen and dining hall of a size adequate to care for the entire student body.

Housing for faculty members is extremely difficult to obtain in Frostburg or its vicinity. This autumn, for example, one new faculty member and his wife and child are having to live in a basement room of the dormitory. Other persons who were employed as faculty members have had to leave their families behind them, and still others have refused appointments because of the impossibility of finding suitable living quarters. The state could well afford to invest a small amount of funds in faculty housing in Frostburg. This project could readily be self-liquidating.

Two other building needs at Frostburg might be considered for the biennium 1949-51 if the state's finances do not permit their construction in 1947-49. There is real need for an auditorium with facilities for instruction in music. A gymnasium and field house that would replace the present antiquated building for physical education would also be a desirable addition to the plant.

It would be desirable to give further study to the needs for a student union building at Frostburg. A considerable number of the students who attend this institution commute from Cumberland and other nearby locations. Both these commuting students and those in the dormitories would benefit by the facilities that could be provided in a building of the student union type. This might be constructed on a self-liquidating basis and financed through student fees. This project needs further study, however, before it is included in the state's program of construction.

The following list, arranged according to priorities, summarizes the building needs at Frostburg State Teachers College:

In the biennium 1947-49:

1. Science building
2. Library (the science building and library will release some space for classrooms and faculty offices)
3. Men's dormitory, including dining hall and kitchen to serve entire campus
4. Faculty housing
5. President's home

In the biennium 1949-51:

6. Auditorium and music building
7. Gymnasium and field house

Project requiring further study:

8. Student union building

Bowie State Teachers College

The Bowie State Teachers College has a relatively new plant which is well adapted to the purpose of preparing teachers for the elementary school. An important need is an auditorium that will also provide facilities for music instruction. Recently it was necessary to move the library into the space formerly used for auditorium purposes, so that the institution is now completely without auditorium facilities. Inasmuch as this is the one institution which prepares teachers for the Negro elementary schools in the counties of Maryland, it is necessary to have an effective program of instruction in music.

Faculty housing is an urgent need at Bowie, inasmuch as there are no privately owned homes available in the vicinity of the College. At present most faculty members are housed in the student dormitories. As suggested in the case of other institutions, a faculty housing project at Bowie could be set up on a self-liquidating basis.

The paving of driveways and landscaping of Bowie State Teachers College campus would involve a relatively minor outlay, but would improve the appearance and accessibility of the institution. The College is located approximately one mile from the nearest paved highway and can be reached only by a single-track unpaved road. This approach to the campus should be widened and hard-surfaced. Shrubbery and trees should be planted so as to screen the main building

from the noise of the Pennsylvania Railroad whose main line lies at the edge of the campus.

As a part of the instructional program at Bowie some emphasis is given to practical agriculture. The President has quite appropriately determined that the graduates need to be able to give some instruction in agriculture to the elementary school children they will teach. These teachers should be in a position to become community leaders for the members of their race and to point the way toward improved economic productivity. To provide suitable demonstration materials the President has developed a few agricultural projects on the acreage owned by the College. To maintain the necessary type of demonstration facilities in modern agriculture, the College needs a few small farm buildings and some machinery. The outlay for such buildings and implements would be a good investment, for it would enable the College to produce on its own land a considerable part of the food used in its dining hall.

A new home for the President would be a desirable addition to the plant at Bowie. The house where the President now lives is a venerable antique which, perhaps, deserves to be preserved as a museum piece, but which lacks much in providing the standard of comfort recognized as desirable in modern times.

At present the upper floor of the academic building is used as a barracks for housing a few men students. If a new dormitory for men were provided the institution could doubtless attract more men into the teaching profession. The present space used for the men's dormitory is small and unsatisfactory for that purpose; it should be devoted to other uses as soon as other housing for men students is available.

The provision of a central-heating plant for the Bowie State Teachers College campus is desirable. It is unfortunate that the water system has been located so close to the buildings, where a serious fire would, almost at the outset, destroy the best means the College would have for fighting the fire. It would be well to consider relocating the water system and the heating plant.

Two projects which are considered desirable at Bowie could be postponed until the 1949-51 biennium. They are a new science building, which would enable Bowie to strengthen its instruction in science, and a gymnasium and field house. The latter should be provided by that time to replace the present antique structure, which is totally unsuitable for a modern program of athletics.

The following list indicates the building needs at Bowie State Teachers College, arranged in order of priority:

In the biennium 1947-49:

1. Auditorium building with facilities for music instruction
2. Faculty housing
3. Paving of drives and landscaping
4. Modern farm buildings
5. President's home
6. Men's dormitory
7. Central-heating plant

In the biennium 1949-51:

8. Science building
9. Gymnasium and field house

Morgan State College

The enrollment at Morgan State College has more than doubled since 1939, and the prospects are for continued increases for a number of years in the future. Some construction is at present under way at this institution, but other additions to the physical plant are absolutely necessary in order to meet pressing needs.

The most urgent need at Morgan State College is for a new building for classrooms and administrative offices. The present dining hall is entirely too small and should be replaced by a much larger unit. The institution is practically without gymnasium facilities; it should have a new gymnasium and field house to be used for instruction in physical education and athletics.

Another dormitory for women, which should include a well-equipped infirmary, is also needed, and another dormitory for men is highly desirable. Morgan State College needs

housing facilities for its faculty members. As suggested in the case of the other institutions, these houses could be provided on a self-liquidating basis.

Morgan State College has extremely limited facilities at present for music instruction; a new building for music, which should include an auditorium seating at least 2,000, is needed.

In order to care for future expansion, additional land should be purchased as opportunity offers to extend the present campus.

The foregoing additions to the plant at Morgan State College should be cared for, if possible, during the biennium 1947-49. During the following biennium, 1949-51, provisions should be made for a new science building, a new home economics building, and for paving driveways and landscaping the campus.

The following tabulation indicates the building needs at Morgan State College arranged in order of priority:

For the biennium 1947-49:

1. Classroom and administrative office building
2. Dining hall
3. Gymnasium
4. Dormitory for women, including infirmary
5. Dormitory for men
6. Faculty housing
7. Music building and auditorium
8. Land for campus expansion (should be purchased as opportunity offers)

For biennium 1949-51:

9. Science building
10. Home economics building
11. Driveway and landscaping of campus

Further consideration:

12. Utilities tunnel

St. Mary's Female Seminary

The present plant of St. Mary's Female Seminary is reasonably adequate for the foreseeable needs of the institution. The most serious shortcoming is the kitchen, which is too

small and poorly equipped. Some of the basement rooms are unsuitable for the classroom purposes for which they are devoted. The small structure where the chemistry laboratory is now housed is inadequate for the purpose; it could be extended at a relatively small outlay and would then provide reasonably good facilities for science instruction.

The site of this institution is extremely limited and should be extended by the purchase of contiguous property, if possible. The shore line is subject to serious erosion and the bulkhead which is now being built should be extended to protect the entire frontage where erosion is likely to occur.

The northeast wing of the dormitory has a defective exterior wall which permits water to enter whenever there is a heavy rain from that direction. Consideration might well be given to the extension of the wing of this building, which would provide a few more dormitory rooms and also a classroom or two, thus permitting the discontinuance of the present unsatisfactory basement classrooms.

The following tabulation indicates the building needs at St. Mary's Female Seminary, arranged in order of priority:

1. Expansion of site
2. Extend small building now used for chemistry to make a satisfactory science laboratory
3. Extend northeast wing of present dormitory

COMPOSITE LIST OF BUILDING NEEDS IN MARYLAND'S STATE-CONTROLLED INSTITUTIONS OF HIGHER EDUCATION

For the guidance of the state authorities in making funds available for plant extension and improvements at the Maryland institutions, a composite list combining the needs of the various institutions, arranged in a priority with respect to urgency, has been prepared. This list is set up in three sections: (a) projects recommended for the biennium 1947-49; (b) projects that could be postponed until the biennium 1949-51; (c) projects that require further study. If the total requests for the biennium 1947-49 are greater than can be financed, in the judgment of the state authorities, then the

survey staff would recommend that appropriations be made just as far down the list as possible, leaving those projects at the end of the 1947-49 list to be cared for during the following biennium.

The composite list of plant needs does not include items already under construction or completely financed. It does include some construction that has been authorized but not yet initiated. The list also assumes that the present institutions will be continued in their present locations with substantially the same program of instructional activities as they now maintain. To the extent that changes are made in the pattern of institutions or in the services they render, the list would be subject to modification. A revision of this list has been submitted in confidential form to the State Planning Commission, embodying certain modifications that the Commission on Higher Education may possibly recommend in the institutional pattern in Maryland. Inasmuch as final decisions regarding the Commission's recommendations had not been reached at the time of drafting this chapter, the list is presented here in its original form.

FOR BIENNIUM 1947-49

Institution	Building	Funds Involved	
Princess Anne.....	Men's dormitory, including dining hall	Major	
Morgan	Classroom and office building	Major	
Princess Anne.....	Faculty housing (self-financing)		Minor
Princess Anne.....	Dairy barn and farm buildings		Minor
U. of Md.....	Women's dormitories to care for 500 or 600	Major	
U. of Md.....	Psychopathic unit of University Hospital	Major	
U. of Md.....	Men's dormitories to care for 400 or 500	Major	
Frostburg	Science building	Major	
Bowie	Auditorium and music	Major	
Morgan	Dining hall	Major	
U. of Md.....	Heating plant	Major	
Bowie	Faculty housing (self-financing)		Minor
U. of Md.....	Baltimore—new wing of University Hos- pital	Major	
Morgan	Gymnasium and field house	Major	
Towson	Faculty housing (self-financing)		Minor
Princess Anne.....	Science building	Major	
Bowie	Paving of roadways, and landscaping		Minor
Morgan	Dormitory for women, including infirmary	Major	
U. of Md.....	Library	Major	
Frostburg	Library	Major	
Princess Anne.....	Library	Major	
Salisbury	Complete third floor dormitory for men		Minor

FOR BIENNIUM 1947-49 (Continued)

Institution	Building	Funds Involved
U. of Md.....	Expansion of engineering, physics, chemistry, and mathematics	Major
U. of Md.....	Baltimore—Nurses home	Major
Frostburg	Men's dormitory, including new dining hall	Major
St. Mary's.....	Expand site by purchase of contiguous property	Minor
Morgan	Dormitory for men	Major
St. Mary's.....	Extend small building used for chemistry	Minor
Frostburg	Faculty housing	Minor
U. of Md.....	Infirmery	Major
U. of Md.....	Student union (self-financing)	Major
U. of Md.....	Addition to women's gymnasium	Major
Morgan	Faculty housing (self-financing)	Minor
Princess Anne.....	Greenhouse for horticulture	Minor
U. of Md.....	Baltimore—Student activities building	Major
Bowie	Farm buildings	Minor
Towson	Library	Major
Morgan	Music building and auditorium	Major
Towson	Swimming pool	Minor
U. of Md.....	Swimming pool	Major
U. of Md.....	Remodeling of agricultural engineering building	Minor
Princess Anne.....	Paving of walks and drives	Minor
Salisbury	Paving of walks and drives	Minor
U. of Md.....	Baltimore—addition to Dental and Pharmacy Building	Major
Bowie	President's home	Minor
Salisbury	President's home	Minor
Towson	Men's dormitory	Major
U. of Md.....	Laundry	Minor
Frostburg	President's home	Minor
Bowie	Men's dormitory	Major
St. Mary's.....	Extension of northeast wing of dormitory	Minor
Morgan	Land for campus extension	Major
Bowie	Central heating plant	Major

IN BIENNIUM FOR 1949-51

U. of Md.....	Dairy and livestock instruction buildings and barns	Major
Frostburg	Auditorium and music building	Major
U. of Md.....	Baltimore—Central Library	Major
U. of Md.....	Greenhouses	Major
U. of Md.....	Interdenominational chapel	Major
Bowie	Science Building	Major
U. of Md.....	More dormitories	Major
Bowie	Gymnasium and field house	Major
Frostburg	Gymnasium and field house	Major
U. of Md.....	Completion of engineering and science group	Major
Morgan	Driveways and landscaping of campus	Minor

PROJECTS NEEDING FURTHER STUDY

U. of Md.....	Auditorium	Major
U. of Md.....	Airport	Major
U. of Md.....	Stadium	Major
Frostburg	Student union building	Major
U. of Md.....	Utilities tunnel system	Major
Morgan	Utilities tunnel system	Major

EQUIPMENT NEEDS

The survey has not had sufficient time to go into details with respect to the needs for equipment at the various state institutions. Two or three general comments may be made.

The state teachers colleges in general have inadequate facilities for instruction in science. The equipment for biological sciences is, in nearly all the state teachers colleges, better than that for chemistry and physics. If the institutions are to develop programs of general education at the junior college level, it is imperative that the work in the physical sciences be strengthened by the addition of a considerable amount of necessary equipment.

Several of the state institutions of higher education lack fireproof vaults for academic records. The loss of academic records is a serious catastrophe at an educational institution. The state should provide immediately for the housing of all essential records in fireproof vaults at the various institutions.

The amounts needed for equipment are relatively small compared with the capital-outlay program that is suggested for other plant improvements. These items for equipment should be provided as a part of the regular operating biennial budget of the institutions.

BUILDING MAINTENANCE

Even a casual observation of the physical plants of the state institutions of higher education in Maryland reveals a large amount of needed maintenance. This condition is not due to any neglect on the part of responsible institutional officials, but rather to insufficient appropriations for the purpose. It should be realized that to build a suitable building is not sufficient; there must be a current appropriation to care for that building and to keep it in satisfactory condition. In practically every instance institutional officials reported that their requests for maintenance budgets had been trimmed far below the point at which satisfactory maintenance could be provided. This is a short-sighted policy for the state, for it

is likely to result in rapid deterioration and shorter life of the buildings.

It would be highly desirable for the state to provide an inspectional service with particular respect to fire hazards and sanitary conditions in the state properties. Observations by the survey staff at some institutions revealed conditions that should not be tolerated because they represent serious hazard to life or health. The prevention of such conditions, while a primary responsibility of the local institutional administration, might be assisted by some central supervision by appropriate agencies of the state.

POLICY IN MAKING APPROPRIATIONS FOR CAPITAL IMPROVEMENTS

In numerous instances where inadequate buildings were observed at the state institutions, the survey staff was informed that the condition was the result of an arbitrary cut in the appropriation requested for the building. It seems that in times past, when careful estimates showed that certain amounts were needed for a given building in a state institution, the legislature would frequently appropriate something less than the full amount. The institution would then proceed to construct as much of the building as it could with the funds made available. Such a plan almost certainly results in unsatisfactory provisions for college buildings. It would be a wise policy for the state legislature, before making any appropriations for new buildings, to make certain that needs of the institutions have been carefully appraised and the costs of the building have been accurately estimated. The state should then appropriate the full amount needed for a building if it appropriates anything at all.

NEEDS FOR CAMPUS PLANNING

The survey staff is impressed by the fact that in the past much construction has been undertaken at certain state institutions without the guidance of a master plan for campus development. There should be on file for each of the state

institutions a general plan for campus development, showing the present structures that are to be retained as permanent features of the plant, the present structures that are ultimately to be eliminated, the location of projected new buildings, the precise location of utility lines, the arrangement of walks and drives, and the general plans for landscaping.

The development of a comprehensive plan for a campus for an institution of higher education requires the collaboration of a qualified architect, a competent educational adviser, and the local institutional authorities and faculty members. When once the plan is decided upon, future construction should be undertaken in accordance with its general design, and no major deviations should be allowed unless the entire plan is reviewed and revised.

VII. PUBLIC JUNIOR COLLEGES FOR MARYLAND ¹

An inquiry into the need and suitable plans for junior colleges in a state should begin with a description of junior college development to date. Because of the limited growth of this type of institution in Maryland, such a description can be brief. The *Directory of Junior Colleges* for the year 1935, published by the American Association of Junior Colleges, listed five Maryland institutions of this classification with a total enrollment of 326 students. One of these junior colleges, known as "St. Mary's Female Seminary," was referred to as a "state" institution, and the remainder as "private" or under denominational auspices. The year of establishment of one of the private units was given as 1912, a date that places it as one of the relatively early, even if not among the first, junior colleges of the country to be established. The *Directory* for 1940 listed six institutions, with two names in the 1935 list no longer in the group, but with three new names. The *Directory* for 1944 again listed six institutions, with two names in the 1940 list gone and replaced by two different names. The facts cited indicate that Maryland has had junior colleges over a long period, but without steady and consistent growth of the movement.

Information concerning junior colleges assembled by the office of the Maryland Commission on Higher Education in September 1946 identifies four institutions designated as junior colleges, namely: the Baltimore College of Commerce, reported as operating under auspices of the YMCA; St. Mary's Female Seminary, an institution in St. Mary's County and designated as a four-year junior college under state auspices; and two "local public" units, beginning work in 1946, and housed with public high schools at Hagerstown and Bethesda-Chevy Chase. These two units represent the first emergence in the state of local public junior colleges.

In addition to these institutions, designated for the office of the Commission as junior colleges, were seven "special

¹ The report on the junior college situation was prepared by a special consultant to the survey staff, Dr. Leonard V. Koos, Professor of Secondary Education, the University of Chicago.

junior college programs in senior colleges." Five of these institutions were reported as under state auspices and two as "private." The state institutions include the State Teachers Colleges for white students at Frostburg, Salisbury, and Towson; the State Teachers College for Negroes at Bowie; and Princess Anne College, the Negro land-grant college at Princess Anne. The private institutions with junior college programs are Mt. St. Agnes College and the University of Baltimore. All but two of these seven two-year programs are reported as having been established before 1946, but those of the State Teachers Colleges at Towson and Bowie were begun in September 1946, apparently in response to the great demand for educational opportunities by returning veterans.

THE NEED FOR JUNIOR COLLEGES IN MARYLAND

The presence of a small number of junior colleges in the state and of the junior college programs in certain senior colleges is indicative of an awareness of what is now generally acknowledged as an important movement in American education. However, the halting and rather limited development until the recent demand by veterans for educational opportunities is hardly an index to what appears to have been a long-time need for junior colleges, as evidenced by the facts presented in this section.

Proportions of Maryland's Population of Junior College Age in School

Whatever other functions the junior college may have—and many functions are claimed for it—the pre-eminent service to be expected of the public junior college is that of universalizing, or democratizing, this educational level, so that larger proportions of the population of junior college age may have the opportunities of schooling beyond high school. This function is in harmony with the American conviction that the interests both of the society and of the individuals who make up that society will be benefited by a lengthened period of education. The need for development of a junior college program in the state may in part, therefore, be in-

licated by the proportions of the population of junior college age who are attending school. A measure of considerable significance in this connection is the proportion of the population between the ages eighteen and twenty who were reported by the *U.S. Census, 1940* as attending school of some kind. Although the best grouping for the purpose would include only the eighteen- and nineteen-year-olds, evidence in this form is not available and, for the purpose of the comparisons here made, the measure available should serve almost as well.

The proportion of this age group reported by the 1940 *Census* as attending school is relatively low. Table 10 (see page 20) which presented these measures for the forty-eight states, places Maryland forty-fourth (forty-fifth if the District of Columbia is considered as a state); that is, only four states had proportions smaller than Maryland. Educational leaders in the state have been aware for some years of this lag. They must also know that a vigorous program of development of educational opportunities at this age level will be necessary to bring the proportions up to those of even the average for the country.

Proportions in the Different Counties

It is not enough to know this proportion for the state as a whole as compared with other states. The proportion may be expected to vary from county to county, and it is important in any inquiry concerning the need for providing additional opportunities to note these variations and, so far as possible, to identify significant factors of variation. Measures for all the counties of Maryland (and Baltimore City) are presented in Table 51, together with the numbers in the population eighteen to twenty years of age and the numbers attending school, from which the measures are computed.

Counties in the table are listed in the declining order of size of the percentages. In the first county in the list, Montgomery, the percentage of those eighteen to twenty years of age attending school in 1940 was 37.2, while for the last county, Calvert, it was 8.7. Thus, the proportion of this age

group in Montgomery County taking advantage of opportunities for education was about four and one-half times as large as that in Calvert County, with all other counties distributed between these wide extremes.

TABLE 51

NUMBERS IN THE POPULATION EIGHTEEN TO TWENTY YEARS OF AGE IN EACH COUNTY
AND THE NUMBERS AND PERCENTAGES OF THIS AGE GROUP ATTENDING SCHOOL*

County	Number 18 to 20 Years Old	Number Attending School	Percentage Attending School
Montgomery.....	4,126	1,533	37.2
Anne Arundel.....	5,501	1,641	29.8
Prince George's.....	4,924	1,012	20.6
Allegany.....	5,277	1,025	19.4
Baltimore City.....	47,946	8,313	17.3
Baltimore County.....	8,765	1,506	17.2
Washington.....	3,895	647	16.6
Cecil.....	1,377	212	15.4
St. Mary's.....	813	123	15.1
Charles.....	1,091	157	14.4
Frederick.....	3,296	470	14.3
Kent.....	744	106	14.2
Wicomico.....	1,948	248	12.7
Howard.....	1,041	131	12.6
Somerset.....	1,154	145	12.6
Caroline.....	893	108	12.1
Harford.....	2,409	282	11.7
Garrett.....	1,422	165	11.6
Carroll.....	2,070	221	10.7
Talbot.....	971	96	9.9
Queen Anne's.....	757	74	9.8
Dorchester.....	1,623	155	9.6
Worcester.....	1,141	108	9.5
Calvert.....	622	54	8.7

*Source: *U.S. Census, 1940.*

Possible Factors Influencing the Proportions

Speculation suggests possible factors of this wide variation from county to county. Among hypothetical factors on which objective evidence was not too difficult to obtain and put the hypotheses to the test are: (1) the proportions of rural-farm population; (2) the proportion of Negro population; (3) the proximity of opportunities for post high school education, as indicated by presence or absence in the counties of higher educational institutions; and (4) the fact that certain counties were operating twelve-grade systems while

schools in the remaining counties were organized on an eleven-grade basis.

(1) The proportion of rural-farm population appears to have some influence on the percentage of eighteen- to twenty-year-olds attending school. These proportions are not reported here in tabular array, but it may be stated that they ranged in 1940 from none (in Baltimore City) to 65.8 percent (in Calvert County). The extent of influence is suggested by the fact that the median percent attending for the half of the counties (and Baltimore City) with the smallest rural-farm population was 16.9, while for the other half of counties the median was 11.6. The median difference is a significant one. The six counties with the highest percentages of the eighteen- to twenty-year group attending had the smallest percentages of rural-farm population. However, the trend is not fully consistent in that some counties with large rural-farm populations had relatively large proportions of this age group attending school.

(2) The proportion of Negro population ranges from almost none (in Garrett County) to 46.5 percent (in Calvert County). There is some reverse relationship between these proportions and the proportions of the age group under consideration attending school. The relationship is suggested by the difference between the medians attending school for the twelve counties (including Baltimore City) with the smallest proportion of Negro population and the twelve with the largest proportions. These medians are, respectively, 16.0 percent and 12.4 percent. The difference is not large and, here again, the relationship is far from fully consistent.

Comparison of the percentages of the Negro population and of the rural-farm population for the counties indicates some degree of positive correlation between the two, suggesting that the two factors may be working together to keep down the proportion of the eighteen- to twenty-year-old group attending school. This is seen in the fact that for the twelve counties (and Baltimore City) with the smallest proportions of Negro population, the percentage of rural-farm population was 24.9; whereas, for the twelve remaining counties, the percentage was 37.3.

(3) For this inquiry on factors influencing the proportion of eighteen- to twenty-year-olds attending school, proximity of opportunities for higher education was assumed to be indicated by the presence in a county of some institution offering work at the junior college level. In practically all cases the institutions were four-year colleges or universities. Twelve counties (with Baltimore City) had such institutions within their borders, while the remaining twelve were without them. The median percentage attending school for the group of counties with higher institutions was 16.2, while that for the group without was 11.6. This is a difference between the medians in favor of the counties with higher institutions of 4.6 percent, which is about two-fifths of the lower median. While the influence is appreciable, it is not notably different from the factors previously reviewed. An effort to explain why the increment due to the presence of a higher institution in the county is not larger will be made below in presenting evidence from a follow-up of high school graduates.

(4) Although Maryland is now committed by statute to a twelve-grade school system and although progress has been made toward that organization, most counties in 1940 were operating on the eleven-grade basis. At the same time, most children were entering school at six years of age, which would bring them to the end of the high school before the eighteenth year of age. Therefore, this early completion of high school was in all probability a factor reducing the proportion of the eighteen- to twenty-year group attending school, as compared with states with systems entirely on the twelve-grade basis. How important an influence it has been on the proportion it is impossible to say, with the evidence at hand, either in comparison with other states or among the counties within the state. It may be stated that the counties with twelve-grade systems in 1940 were all in the highest third in the percentage of the eighteen-to-twenty age group attending school. However, these were also mainly counties with smaller proportions of rural-farm and of Negro population and also having higher institutions within their boundaries.

Proportions of High School Graduates Continuing Their Education

Evidence from the *U.S. Census* thus far drawn upon for this report concerns the portion of the population in the eighteen-to-twenty age group. Another type of information significant in considering the need for junior colleges in the state concerns the youth being graduated from high schools. In some respects these graduates bring the inquiry closer to the junior college problem, since they may be assumed to be in larger proportions than the eighteen-to-twenty age group ready for work at the collegiate level.

Since 1926 the Maryland State Department of Education has made yearly follow-up studies of high school graduates in the counties outside Baltimore City, from which compilations have been made of the numbers and percentages continuing their education or being otherwise employed during the year following graduation. The evidence for certain years from these compilations has been drawn upon in Table 52,

TABLE 52

NUMBERS OF GRADUATES OF MARYLAND HIGH SCHOOLS IN 1926, 1930, 1935, 1940, AND 1944, AND THE NUMBERS AND PERCENTAGES CONTINUING THEIR EDUCATION IN THE YEAR FOLLOWING GRADUATION

Year of Graduation	Total Number	Number Continuing	Percentage Continuing
1926.....	2,619	1,363	52.0
1930.....	3,785	1,573	41.6
1935.....	4,839	1,298	26.8
1940.....	6,813	1,806	26.5
1944.....	6,511	1,455	22.3

which presents the total numbers of graduates, mainly at five-year intervals, and the numbers and percentages of these graduates who were continuing their education in the year following graduation. It may be seen that, while the numbers of graduates increased rapidly, the number continuing did not rise correspondingly. On the contrary, the percentages over the years show a marked decline. In partial explanation, it may be pointed out that the year 1930 witnessed the

beginning of the economic recession, which by 1935 discouraged even larger proportions from costly higher education. The low figure for 1944 is readily explained by the noncontinuance of young men who were entering the armed forces.

Beyond these special explanations of the decline is the fact that, for the country as a whole, the proportions—not the numbers—of public high school graduates continuing their education has been dropping off over a long period of years, for the reason that high school education was being popularized much more rapidly than college education. The public junior college is destined to be the means of popularizing the next higher level.

Before leaving consideration of the evidence in Table 52, it should be explained that “continuing education” does not always mean attending a higher institution, as the tabulations included those attending schools, such as commercial or other vocational schools, of less than college grade. The proportion so classifiable is not readily available for report, but it is certain that the numbers and proportions continuing in institutions of collegiate grade were considerably smaller than those given in the table.

Inquiry into the need for junior colleges should come somewhat nearer than has so far been done in this report to the proportions of graduates continuing their education in institutions at the collegiate level. In order to accomplish this, special analysis has been made of the evidence from the follow-up investigation made annually by the Maryland State Department of Education. For this special analysis, only those graduates who entered institutions of post high school grade were counted, against all the graduates of the high schools represented. The evidence used was that gathered concerning the graduates in 1940. The reasons for taking this year are two: (1) the desirability of ascertaining conditions in a normal pre-war year, and (2) the possibility of making direct comparisons with the outcomes of a follow-up study of high school graduates in certain midwestern and California communities previously made for 1941 by this investigator.

The analysis for Maryland involved more than four thousand graduates of the largest high schools in the state outside of Baltimore (for which comparable evidence is not available). These graduates were approximately 60 percent of all graduates in the twenty-three counties of the state in the year considered. Comparisons within the state included graduates of high schools: (1) in cities with higher institutions; (2) in counties with, but cities without, higher institutions; (3) in cities or counties with higher institutions, that is, (1) and (2) combined; and (4) in cities and counties without higher institutions. The purpose of these comparisons, beyond that of ascertaining proportions of graduates continuing in collegiate institutions, is to find the influence of proximity of existing institutions on the proportions continuing. The study in the Midwest and California included almost twelve thousand graduates in fifty-seven high school situations, some in cities without junior colleges but most of them in cities with either tuition-charging or tuition-free junior colleges.² For the purposes of this report it would have been preferable to have included other eastern states, rather than those farther west, but no such study could be made owing to the infrequent organization and maintenance of local public junior colleges in the eastern region.

The comparisons are made in Table 53. The table reports both the distribution of the percentages of graduates continuing in the different groups of high schools and the median percentages. It is clear, as is to be expected, that the presence of a higher institution in the city or county of location of the high school affects the percentage positively, and there is even a difference in favor of high schools in cities with higher institutions as compared with high schools in counties with higher institutions but not in the cities of their location. The percentages for high schools in cities and counties without higher institutions were very low. The median percentage for high schools with higher institutions in the cities or counties of location is about twice that for the high schools in cities and counties without.

² Leonard V. Koos, "How to Democratize the Junior-College Level," *School Review*, LII (May 1944), 271-84.

TABLE 53

PERCENTAGES OF GRADUATES OF HIGH SCHOOLS (WITH 100 OR MORE GRADUATES) IN CERTAIN TYPES OF SITUATIONS IN MARYLAND IN 1940, AND IN THE MIDWEST AND CALIFORNIA IN 1941, CONTINUING THEIR EDUCATION IN INSTITUTIONS AT THE COLLEGIATE LEVEL

PERCENTAGES CONTINUING	HIGH SCHOOLS IN MARYLAND				HIGH SCHOOLS IN MIDWEST AND CALIFORNIA		
	In Cities with Higher Institutions (6)*	In Counties with, but in Cities without, Higher Institutions (8)	In Cities or Counties with Higher Institutions (14)	In Cities and Counties without Higher Institutions (5)	In Cities without Junior Colleges (12)†	In Cities with Tuition-Charging Junior Colleges (15)	In Cities with Tuition-Free Junior Colleges (30)
75.0-79.9.....	.....	.....	.....	.....	.....	.....	1
70.0-74.9.....	.....	.....	.....	.....	.....	.....	.....
65.0-69.9.....	.....	.....	.....	.....	.....	1	1
60.0-64.9.....	.....	.....	.....	.....	.....	1	4
55.0-59.9.....	.....	.....	.....	.....	.....	.....	8
50.0-54.9.....	.....	.....	.....	.....	1	1	4
45.0-49.9.....	.....	.....	.....	.....	.....	.....	4
40.0-44.9.....	.....	.....	.....	.....	.....	.....	3
35.0-39.9.....	.....	.....	.....	.....	1	1	4
30.0-34.9.....	.....	.....	.....	.....	.....	4	.....
25.0-29.9.....	1	.....	1	.....	1	3	1
20.0-24.9.....	1	.....	3	.....	2	3	.....
15.0-19.9.....	1	2	5	.....	7	.....	.....
10.0-14.9.....	2	3	3	1	.....	.....	.....
5.0- 9.9.....	1	2	3	1	.....	.....	.....
0.0- 4.9.....	.....	1	1	.....	.....	.....	.....
Median percentage‡.....	15.2	11.7	12.8	6.8	19.7	31.8	53.5

* Numbers of situations represented.

† All except one in Illinois, Indiana, and Ohio.

‡ Located in original distribution and not computed from this distribution.

In further interpretation of the distribution in the first column (Maryland cities with higher institutions), it may be stated that the three highest percentages are for the graduates of high schools in the cities with state teachers colleges, and the three lower percentages are for high schools in cities having private colleges with high tuition rates, two of them admitting students of one sex only.

Table 53 does not include the distribution of percentages and the median percentage for eight high schools in cities or counties with higher institutions (one high school in a city with a higher institution and seven in cities without, but in counties with, higher institutions) with fewer than 100 graduates. The actual range of percentages for this particular group is from 1.4 to 16.9, with five of the high schools having rather similar percentages ranging only from 13.4 to 16.9. The median percentage for this group of relatively smaller high schools is 13.9, which is not far from the median shown in Table 53 for the larger high schools in cities or counties with higher institutions.

Despite the preferability of figures from eastern states for such a comparison, comparison with conditions in the Midwest and California adds meaning to the evidence here reported from Maryland. (It may be said in passing that inclusion of situations in California affects hardly at all the medians for the Midwest and California, for the reason that the California junior colleges are all tuition-free, and the proportions of graduates continuing in tuition-free junior colleges in the Midwest are practically on a par with those in California). (1) The column headed "In Cities without Junior Colleges" reveals the important inference that larger proportions of graduates of these midwestern high schools continued at the college level than did graduates of Maryland high schools in cities with higher institutions. The median for this midwestern group is about three times as large as that for the graduates of Maryland high schools in cities and counties without higher institutions. Only two of these midwestern cities had offerings at the collegiate level: the one with the highest percentage had two colleges, and one of those

lowest had an extension center of a state university. The lower measures for Maryland could have been expected from the evidence previously presented on the proportions of the eighteen-to-twenty age group in the population attending school. (2) The maintenance of a local public junior college, even though it is a tuition-charging institution (the average annual tuition in this group was under \$100) in the median situation, increased the proportion continuing at the collegiate level by about three-fifths. (3) The maintenance of a free-tuition local public junior college in the median situation brought up the proportion continuing to more than half of all high school graduates and multiplied the proportion continuing, as compared with the situations without junior colleges, by two and one-half to three times. The general inference from the comparisons is that, if popularization of the collegiate level of education is regarded as desirable, the local public junior college is greatly needed, and the popularization is remarkably enhanced by having the junior college tuition-free.

Forces behind the Need for the Junior College

The popularization, or universalization, of the post high school period of education represented in the junior college is being brought on by potent forces, some of which it is appropriate at this point to mention. One of these is the technological development which has been operative for a century or more and which has been steadily and increasingly, except for the interval of the war period, forcing youth out of employment. This force is resuming operation now that the war is over, and a further advance may be expected in the age at which youth can find work. Another force is the rapidly increasing complexity of life and living which requires a longer period of education in order to equip the individual to cope with that complexity. Complexity has been added by numerous inventions, characterizing the "machine age," which came with urbanization of the population but which has extended also into the rural community. Still another potent force is the growing conviction of the need of

③ equalizing opportunities in a democratic society: extended education must be made available to all youth and not merely to the children of the economically favored. Attainment of this democratization can come most economically and conveniently by extending the local school system to include junior college years. An immediate force of great potency is the demand of the returning veteran for education, and the force has accentuated the development of junior colleges in all sections of the country. It should, however, be kept in mind that the long-time factors, rather than the immediate forces, assure a permanent place for the junior college in the American pattern of education.

A Program to Meet the Need

It should go almost without saying that the popularized junior college level requires a broad program suited to the needs of a much wider range of interest and ability than is usually represented in the student body in the first two years of the college or university. The history of most public junior colleges has been that they begin by reproducing the courses most commonly given in the first two years of higher institutions, thereby rendering the preparatory service to the upper years. After making good in this preparatory program, they tend to expand the program to serve the needs not only of the preparatory group but also of students who have no intentions of going beyond the junior college level. Numerous studies have shown that students doing their first two years of work in junior colleges, on the average, do as well or better in senior college years than students who have spent their first two years in the college or university. The importance of serving the nonpreparatory, or "terminal," group with a suitable program may be appreciated if one is aware that, for junior colleges of the country as a whole some years ago, only about a fourth of all students entering junior colleges continued their education at the senior college level.³

³ Walter Crosby Eells, *Why Junior College Terminal Education?* Terminal Education Monograph No. 3 (Washington: American Association of Junior Colleges, 1941), pp. 62-65.

The proportions of preparatory and nonpreparatory students will vary from community to community. In a small proportion of situations almost all students will be planning to continue their studies at the senior college level, whereas at the other extreme will be communities in which almost all students will be interested in terminal programs.

Before going on to illustrate what is being done to develop programs for students who will not continue their formal education beyond the junior college, mention should be made of the attitude sometimes held by persons acquainted only with traditional higher education toward the preparatory service of the junior college: they are convinced that the junior college cannot render the preparatory service and that only the higher institution that will have the student in his later years can administer an adequate preparatory program. Mention has previously been made of the numerous investigations that establish the competence of junior college graduates after transfer to the college or university. Contact with junior colleges, and with the junior college idea in general, tends to bring assurance that junior colleges are able to rise to their full scope of function, in both preparatory and all nonpreparatory services. An interesting instance of a shift of position in this regard is that of President Conant of Harvard University, who some years ago urged that junior colleges be developed for students not continuing to the senior college level, but that all students who attend the usual college or university transfer as high school graduates to these higher institutions.⁴ More recently, President Conant has advocated the development of local public junior colleges, designated as "community institutes," that would include preparatory programs in the total program. He did so by giving approval to the recommendations of the Educational Policies Commission of the National Education Association that these community institutes provide for five groups of students, the third of which in the following list would be those in preparatory programs: (1) those who want to prepare for

⁴James B. Conant, "Higher Education in a Democracy," *Official Report, American Association of School Administrators* (Washington: American Association of School Administrators, 1938), pp. 127-28.

“various technical and semiprofessional occupations which require all the training the high schools can give and one or two years in addition”; (2) “those who wish further training in the occupations for which high schools provide the basic preparation”; (3) “those who look forward to professional training in universities or technical schools but for various reasons prefer to take the first two years’ work while living at home”; (4) “those who wish to round out their education before entering employment or becoming homemakers”; (5) “adults and older youths, mostly employed, who no longer attend school full time, but wish to continue their education during their free hours.”⁵

The character of preparatory programs in junior colleges may be readily inferred from the offerings in the first two years of colleges and universities. The scope and make-up of terminal programs are less well known and will be illustrated by reporting on the numbers and proportions of preparatory and terminal curriculums included in the offerings of public junior colleges in California and, second, the specific kinds of terminal curriculums frequently provided in junior colleges.

(1) A reason for using the California junior colleges for the first type of illustration is the longer and greater development of junior college education there than in other states—a development that would be likely to lead to discovery of the kinds of programs needed to serve all youth. Twenty-seven junior colleges are represented in this analysis, which are those whose catalogs were readily available at the time of making the study. A count of the curriculums offered in these twenty-seven junior colleges showed a total of 257 curriculums labeled as preparatory to higher institutions, 232 terminal curriculums, and 48 put forward as both preparatory and terminal. Thus, the numbers and proportions of preparatory and terminal curriculums were almost equal. The average number of terminal curriculums was found to be 8.6, which indicates a strong development when the relatively short history of the junior college movement is considered.

⁵ James Bryant Conant, “Public Education and the Structure of American Society,” *Teachers College Record*, XLVII (December 1945), 185-86.

(2) The second type of illustration is based on an analysis of the offerings in forty-seven public junior colleges, including the twenty-seven in California and twenty more junior colleges in eleven other states. All the institutions represented have made efforts to develop terminal curriculums, although it could not be contended that these forty-seven junior colleges have done more along this line than all others. Tabulation of the terminal curriculums offered grouped them into six main divisions, namely, technical and industrial, agricultural, commercial, home economics, art and music, and general cultural.

The technical and industrial curriculums are at two main levels, which may be referred to as semiprofessional and trade. The occupations toward which the former are pointed are to some extent indicated by their titles, among which are general engineering, aviation, surveying, electrical engineering, radio, mechanical engineering, oil technology, laboratory technical, mining, drafting, and architectural drafting. An occupational designation often used in connection with these curriculums is that of "technician." Among trade-level curriculums found in this technical and industrial group are general shop, building trades, millwork, auto mechanics, welding, sheet metal, and printing. The agriculture curriculums are usually referred to by using that term, although an occasional specialized curriculum, such as landscape gardening, nursery and gardening, or floriculture appears in the offering. Commercial or business curriculums are among those most frequently encountered in the catalogs. The most recurrent curriculum designations in this field are general business, secretarial, general merchandising, bookkeeping and accounting, banking, and physicians' and dentists' secretarial. Terminal curriculums most often offered in the field of home economics are home economics, homemaking, dress-making, and cosmetology. The full array of terminal occupational curriculums also includes art, music, speech and dramatics, and journalism. It is of considerable significance that numerically prominent among terminal curriculums is one that bears the name "general" or "general cultural."

About two-fifths of all the catalogs analyzed list such a curriculum. Statements made in the catalogs concerning these curriculums are to the effect that they are intended for students who will not or cannot continue their formal education beyond the junior college level but wish to round out their general education rather than prepare for an occupation. It should be said further that the terminal occupational curriculums named in the foregoing paragraphs are usually not exclusively occupational but are made up in part of non-occupational, or general, courses. The proportion of general courses varies considerably from institution to institution, and sometimes from curriculum to curriculum.

WHERE AND HOW TO ORGANIZE THE JUNIOR COLLEGE

High School Enrollments and Feasibility of Establishment of Junior Colleges

Following a canvass of the need for junior colleges in the foregoing section of this report, consideration logically turns to the problems of where and under what organizational arrangements these units in the school system should be established and maintained. In previous inquiries the size of high school enrollment has proved as good a criterion of feasibility of establishment as any so far used, and this criterion will, therefore, be applied to the situation in Maryland. In certain of these earlier inquiries in the Midwest a minimum desirable junior college student body of 175 to 200 students was assumed, and the locations of junior colleges were projected by identifying the communities with high school enrollments large enough to assure the minimum junior college student body by the time the junior college has had time to become well established. This minimum of 175 to 200 takes into account factors such as the cost per student per year (which rises rapidly as enrollment falls below this number) and the number of students needed to justify a suitable curriculum. In these inquiries in the midwestern situation, the average proportion of junior college enrollments to high school enrollments was one third; that is, the minimum junior

college enrollment was expected, on the basis of average experience in free-tuition institutions in the region, to be about a third of the four-year high school enrollment in the community. On this basis, a junior college of the minimum enrollment might be expected to develop in a community with a high school enrollment of 500 to 600 students.

It should be emphasized that the average reported is for junior colleges that had been in operation for some time, that is, from a few to many years. Except in unusual circumstances it would not be attained during the first year or two of operation of junior college units. In view of the smaller proportions of the population eighteen to twenty years old in Maryland who in 1940 were attending school and of high school graduates of 1940 who continued their education at the collegiate level, it would be hazardous in a prediction for Maryland to assume that a ratio of 1 to 3 of junior college to high school enrollment would soon be reached, although there should be no basic reason, if junior colleges are established and maintained under favorable auspices, why the proportion in Maryland should in the long run lag behind that in other states. A report of this kind should keep its eye on the long-run development and at the same time avoid an optimism concerning these proportions that disregards current conditions. In harmony with this point of view, a more conservative ratio of about 1 to 4 between junior college and four year high school enrollments will be applied, not for the proximate future, but for a period of a few to several years following establishment of tuition-free local junior colleges.

Strictly Local Junior Colleges Hardly Feasible

The first inquiry here is concerning the feasibility of an accessible distribution of junior colleges in the state, using as communities of location the present locations of high schools. For purposes of this inquiry the distribution, by size, of all white high schools is presented in Table 54. This distribution is for the school year 1943-44, which is not the year of peak enrollments but near enough to peak conditions

for the present purpose. Of the total of 134 white high schools in the state, only 29, or fewer than one-fourth, have enrollments of 500 or more. The group with 500 to 599 students, including 6 high schools, would appear to be below the point of feasibility, but would probably rise to it at the time of peak enrollment and will rise to it with the normal growth of high schools. Of these 29 high schools, 7 are in

TABLE 54
DISTRIBUTION BY SIZE OF ENROLLMENT IN 1943-44
OF PUBLIC HIGH SCHOOLS FOR WHITES IN MARYLAND

Enrollment	Number
Fewer than 100.....	37
100-199.....	38
200-299.....	22
300-399.....	8
400-499.....	..
500-599.....	6
600-999.....	11
1,000 and over	12
Total.....	134

Baltimore City, junior college possibilities of which are given separate consideration in this report. The remaining 23 of these larger high schools are concentrated in twelve of the twenty-three counties. A glance down the first column of figures in Table 55, a column which gives the enrollment of the largest high school in each county, will identify eleven counties, the largest high schools in which had enrollments clearly falling below the criterion being applied. These counties are Calvert, Caroline, Cecil, Charles, Howard, Kent, Queen Anne's, St. Mary's, Somerset, Talbot, and Worcester. This is too large a number of counties to be omitted in any democratic distribution of opportunities at the junior college level.

TABLE 55

ENROLLMENT IN 1943-44 OF THE LARGEST WHITE HIGH SCHOOL IN EACH MARYLAND COUNTY, ENROLLMENTS OF HIGH SCHOOLS AT DIFFERENT DISTANCES FROM THE LARGEST HIGH SCHOOL, AND TOTAL ENROLLMENT IN EACH COUNTY*

COUNTY	ENROLLMENT OF LARGEST HIGH SCHOOL	DISTANCE FROM THE LARGEST HIGH SCHOOL								TOTAL ENROLLMENT
		10 Miles or Less		10 to 20 Miles		20 to 30 Miles		Over 30 Miles		
		Number of High Schools	Total of Enrollments	Number of High Schools	Total of Enrollments	Number of High Schools	Total of Enrollments	Number of High Schools	Total of Enrollments	
Allegany.....	2,176†	1	42	5	1,329	1	386	.....	.....	3,933
Anne Arundel.....	1,018	2	404	1	979	1	153	.....	.....	2,554
Baltimore County†.....	1,426	1	138	1	504	.....	.....	.....	.....	2,068
.....	1,240	1	1,199	3	1,576	.....	.....	.....	.....	4,015
Calvert.....	261	.....	.....	.....	.....	.....	.....	.....	.....	261
Caroline.....	204	2	265	2	273	.....	.....	.....	.....	742
Carroll.....	620	3	447	4	618	.....	.....	.....	.....	1,685
Cecil.....	422	2	265	3	486	.....	.....	.....	.....	1,173
Charles.....	212	.....	.....	3	300	1	72	.....	.....	584
Dorchester.....	543	1	66	2	190	2	111	.....	.....	910
Frederick.....	1,304	3	450	2	643	1	114	.....	.....	2,511
Garrett.....	623	.....	.....	1	89	2	206	1	236	1,154
Harford.....	507	1	128	5	871	.....	.....	.....	.....	1,506
.....	252	2	321	1	121	.....	.....	.....	.....	694
Howard.....	264	.....	.....	3	209	.....	.....	.....	.....	473
Kent.....	1,046	4	1,343	2	303	2	191	.....	.....	2,883
Montgomery.....	795	5	1,993	3	692	1	155	.....	.....	3,635
Prince George's.....	153	.....	.....	2	191	.....	.....	.....	.....	344
Queen Anne's.....	229	.....	.....	.....	.....	1	173	.....	.....	402
St. Mary's.....	217	.....	.....	2	115	1	208	.....	.....	540
Somerset.....	357	2	224	.....	.....	.....	.....	.....	.....	581
Talbot.....	1,749	2	339	2	454	.....	.....	.....	.....	2,674
Washington.....	831	4	294	.....	.....	1	37	1	132	1,162
Wicomico.....	238	1	65	1	202	.....	.....	.....	.....	713
Worcester.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	16,687	37	8,072	48	10,145	15	2,014	2	368	37,197

* Figures given are on the four-year high school basis.

† Figure given is for total enrollment of two high schools in Cumberland.

‡ Two junior college centers suggested for this county. See text for interpretation.

Feasibility on a County-wide Basis

Inquiry concerning feasibility, which takes into account total four-year high school enrollments within the counties, points to a much more favorable outcome than does the inquiry concerning feasibility of strictly local junior colleges. These total enrollments are reported in the last column of Table 55, which finds only four counties, namely, Calvert, Kent, Queen Anne's, and St. Mary's Counties, below the working minimum.

Feasibility on the county-wide basis is further indicated by the distribution, by distance from the largest high school, of other high schools in each county shown in the second, third, fourth, and fifth columns of Table 55. Looking first at the totals at the foot of these columns, one may note that 16,687 of the total of 37,197 students were in the largest high schools in the several counties, that 8,072 more were in 37 high schools at distances of ten miles or less from these high schools, and 10,145 in 48 high schools at distances greater than ten miles but not more than twenty miles. These distances may be regarded as for the most part feasible for daily transportation of students to and from school. Only 2,014 students in 15 high schools were at distances of from twenty to thirty miles, and 368 students in two high schools were at greater distances from the largest high schools. Certainly some of the prospective students from these remote communities also would be within commutable distance of junior colleges located in the communities with the largest high schools. The evidence for the individual counties in the columns above these totals is in the main in harmony with these totals in that most smaller high schools are at commutable distances from the largest schools.

The reader is warned against assuming that the distribution of distances of other high schools from largest high schools would be the same as the distances of prospective students from these largest high schools. Obviously, some of the residences of students would be nearer and some farther away than the high schools, and only an extensive investigation of these distances could be used in determining finally

the location of individual junior colleges. Nevertheless, the evidence reported affords assurance of the feasibility of establishing junior colleges accessible to almost all prospective students in all but a few of the counties. The relative compactness of the distribution of population in the state conduces to feasibility of a system of local public junior colleges. The feasibility is enhanced by the county school district, which seems almost made to order for the purpose. In addition to the factors in feasibility already apparent, this district organization, as will be pointed out subsequently, is favorable to a highly desirable intimate articulation of the junior college with the lower school levels in Maryland's system.

Commentary on Feasibility County by County

The consideration of feasibility in the individual counties is here carried somewhat further than through the general approach made possible in Table 55, by making a running commentary on feasibility county by county. This commentary is made with full awareness that the tentative suggestions made would be set aside by a more nearly complete acquaintance with many local conditions than is possessed by the investigator. It is believed, however, that a better understanding of feasibility and the problems involved in projecting a system of local public junior colleges is made possible by this additional canvass. The reference to "small," "medium," and "large" junior colleges in this commentary refers to the expectation that junior college enrollments in the counties in the course of a few to several years after establishment would be, respectively, 150 to 300, 300 to 500, and 500 and more students.

Allegany County.—The total high school enrollment in this county, rather favorably concentrated, justifies the expectation that, if properly located, a large junior college could be assured. A complicating factor is the presence in the county of a state teachers college eleven miles distant from the residence of the main body of population and high school students. This problem is discussed below in considering the

possible junior college service of all three state teachers colleges for whites.

Anne Arundel County.—High school enrollment in this county indicates a single large junior college, but the fact that there are two rather large high schools at a considerable distance from each other suggests also two small (or, perhaps, medium) junior colleges at Annapolis and Glen Burnie. The presence of a small private college for men which does not serve many local students⁶ does not set aside the need for a junior college, nor could the presence of a junior college affect seriously enrollment in this private college.

Baltimore County.—High school enrollments in this county indicate a large junior college or two units of medium size. The suggestion of two junior college centers—one at Catonsville and the other at Towson—is encouraged by the direction of main routes of transportation toward, rather than around, Baltimore City and the separation of the southern portions of the county by Baltimore. Even with two junior college centers, it would be desirable to permit students from southeastern portions of the county to attend junior colleges of Baltimore City. The special factor in the situation in this county—the presence at one of the centers of a state teachers college—is considered later in this report.

Calvert County.—High school enrollment in this county is totally so small as to preclude feasibility on the grounds of an unreasonably high cost per student per year or of a too-restricted curriculum offering, or both. A procedure recommended for making junior college level education available to youth in the few counties with such small high school enrollments would be to subsidize students wishing to attend some free-tuition junior college outside the county and not within commuting distance, to the extent of subsistence while living away from home.

Caroline County.—A junior college of small enrollment is indicated for this county located at Denton, the county seat, which is centrally located.

⁶ Not a single graduate of the June 1940 class of the Annapolis High School, included in the study of the need for junior colleges above, entered this college during the following school year.

Carroll County.—The high school enrollment for this county indicates a junior college of medium size, inasmuch as the community with the largest high school is centrally located and all other high schools within commuting distance. The private four-year college in this community drew only 11 of the 1940 graduates of this largest high school, and the total of this high school class who entered any institution of collegiate grade the following school year was only 12.9 percent—a proportion only about a fourth as large as the median shown in Table 53 for high schools in communities with tuition-free junior colleges.

Cecil County.—A small junior college is indicated for this county. If it should be established at Elkton, the county seat, where the largest high school is located, and if (as should be the policy) movement of students across county lines is encouraged where convenience suggests, the students from the Perryville region might be served by a junior college at Bel Air in Harford County (see below).

Charles County.—A junior college in this county would at best be a small one inasmuch as the total high school enrollment in 1943–44 was under 600. The scattered geographic distribution of this enrollment would also be a factor of discouragement. Because of its central location, the county seat, which has the second largest high school, would be the preferable location.

Dorchester County.—A small junior college would be indicated here. It should be operated at Cambridge, the county seat. While Cambridge is not centrally located, there is no other large population or high school center.

Frederick County.—The high school enrollment in this county points to a large junior college unit at the centrally located county seat of Frederick. A private women's college is located here, but only 8 students from the 1940 class of the local high school entered this institution; and of the entire class of 244 graduates, only 31, or 12.7 percent, continued their education at the collegiate level.

Garrett County.—High school enrollment in this county justifies the expectation of a small junior college at the county

seat. It might even be a unit of medium size except for the relatively scattered distribution of other high schools in the county.

Harford County.—A junior college of medium size, located at the county seat, is indicated for this county. No high school in the county would be beyond commuting distance. In commenting on Cecil County, suggestion was made that students from Perryville be served at Bel Air.

Howard County.—The relatively small enrollments of all individual high schools, the total high school enrollment, and the rather widely scattered distribution of the high schools indicate only at best a small junior college enrollment. If established, it might be located at Ellicott City, the county seat. If the policy of permitting or encouraging students to cross county lines, previously suggested, is followed and it is deemed inadvisable to establish a junior college in Howard County, students at the junior college level from the Ellicott City and Elkridge sections might attend junior colleges at Catonsville or in Baltimore City, students from Lisbon at Frederick, and students from Clarksville at Bethesda-Chevy Chase in Montgomery County.

Kent County.—The high school enrollment here is so small as to discourage establishment of a junior college for this county alone. However, if the student resources of the adjoining county, Queen Anne's are joined with those of Kent County and a junior college is established at Chestertown, which would be within commuting distance for students from Queen Anne's, a small junior college is indicated. A deterrent to such an arrangement might exist in the presence in Chestertown of a privately controlled but publicly supported college which in 1940-41, enrolled 9, or 14.3 percent, of the 1940 graduates of the high school at Chestertown. These 9 were all the 1940 graduates who entered collegiate-level institutions.

Montgomery County.—One large or two small junior colleges are indicated by the high school enrollments of this county. If a single unit is established in the Bethesda-Chevy Chase region, it would appear to be within commuting dis-

tance of almost all, if not all, high school communities in the county. A publicly controlled, tuition-charging junior college was established in September 1946 in the Bethesda-Chevy Chase High Echool.

Prince George's County.—Total high school enrollment would indicate a large junior college in this county. The largest high school is at Hyattsville, but there are other high schools almost as large. A deterrent to establishing a junior college might be the presence in the county of the University of Maryland. Although this institution is but a few miles from Hyattsville, only 33, or 19.4 percent, of the total of 170 graduates of the high school there in 1940 entered it. These 33 graduates of this high school in 1940 were also the only graduates who continued at the collegiate level.

Queen Anne's County.—High school enrollment in this county is too small to warrant establishment of a unit, except in cooperation with Kent County (see comment on that county).

St. Mary's County.—The high school enrollment in this county is too small to make feasible the maintenance of a junior college. However, the county contains a state-operated, tuition-charging, four-year junior college for women, which offers a diversity of preparatory and terminal curriculums. Its enrollment in 1946 is reported as fewer than a hundred. Its enrollment of students of one sex only, its location in a county and region of small population, and its tuition-charging policy are certain to retard its further growth in size of enrollment.

Somerset County.—The small high school enrollment and its scattered distribution make the feasibility of even a small junior college, as previously defined, questionable. Feasibility at Princess Anne might be indicated by associating its territory with Pocomoke in Worcester County, but the solution suggested for Worcester County, which seems preferable, would cancel the feasibility. In the light of information available, serving the Somerset students within reach at Salisbury in Wicomico County appears to be the arrangement to recommend.

Talbot County.—Total high school enrollment places this county somewhat under the point of feasibility for a small junior college, but including Preston in western Caroline County in the territory to be served would provide a situation approximating feasibility.

Washington County.—A large junior college is indicated for this county inasmuch as all but one high school outside the county seat of Hagerstown are within convenient commuting distance. A tuition-charging local public junior college was established in September 1946.

Wicomico County.—The high school enrollment here would indicate feasibility of a small junior college. The State Teachers College at Salisbury, the centrally located county seat, is already serving in this capacity for the county and (as will be reported in the subsequent section dealing with the problem of state teachers colleges as junior colleges) serves to some extent as a regional junior college.

Worcester County.—The high school enrollment in this county indicates a small junior college. The community with the largest high school, Berlin, is not well placed for such a unit, and it would seem better to establish it at Snow Hill, the county seat, where the high school enrollment is almost as large. This location would bring Pocomoke within commuting distance, and only prospective students in and near Crisfield in Somerset would be remote from a junior college unit.

Outcomes of the County-by-County Canvass

A recount of the county-by-county examination for feasibility of junior colleges for white students in the twenty-three counties outside of Baltimore City yields indications for nineteen counties which could have junior colleges within their borders, if the findings of this exploratory inquiry are borne out by more intensive investigation. The number of junior colleges indicated, that is, twenty-one, is larger by two units than the number of counties, since two units each were indicated for two counties. Sixteen of the junior colleges are indicated for county-seat location. In the passage

of a few to several years, five of the junior colleges would probably be large, with 500 or more students; four would be medium, with 300 to 500 students; and all the twelve remaining would be small, with 150 to 300 students. Of the four counties which by this arrangement would be without local junior colleges within their boundaries, two would be rather well served by junior colleges in adjoining counties, thereby injecting a small element of regionalism into a proposal for junior colleges otherwise established on the principle of localism. Prospective students in two counties only would not be served by local public junior colleges, and one of these now has within its boundaries a junior college for women operating under state auspices. For students at the junior college level in these two counties, it would be desirable to make attendance possible by subsidization for subsistence away from home.

Local versus Regional Junior Colleges

Application of the principle of localism in the proposals of this report is urged by the conclusions from an earlier investigation which found the proportions of graduates of high schools at different distances from state, or regional, junior colleges entering these institutions.⁷ The percentages from local high schools entering local junior colleges and regional junior colleges were both large and approximately equal. However, the percentages from high schools from outside the districts of location of the regional junior colleges were so small as to discredit the principle of regionalism. On this account, in this report a policy of regionalism has been applied only to a limited extent and where local junior colleges are manifestly not practicable.

Types of Organizational Relationship to Schools Below

With the location of local public junior colleges tentatively determined, the issue naturally turns on their organizational relationships to the school systems of which they are to be

⁷ Leonard V. Koos, "Local versus Regional Junior Colleges," *School Review*, LII (November 1944), 525-31.

a part. Local public junior colleges are of three main types in respect to this relationship. For the country as a whole in 1940, only about a third of all local units were housed separately from high schools. The large majority were housed with high schools and are what the writer has termed "associations," with varying degrees of relationship to these high schools ranging from something approaching separation to an arrangement approximating an intimate tie-up with the high school level. The associations are on a 4-2 or 3-2 basis, depending on whether the high school is a four-year or a three-year institution. The third type has emerged during the last ten to twenty years and involves the integration of the two junior college years with the last two high school years into a four-year junior college unit. This type of unit is almost always accompanied by organization in the same school system of four-year junior high schools including grades seven to ten. The resulting organization of the school system is referred to as the "6-4-4 plan." Fifteen to twenty school systems throughout the country are now committed to this pattern of organization, and many other school systems are now giving it serious consideration.

Most persons first giving thought to the junior college have in mind a two-year separate unit, when, in point of fact, these junior college years in local school systems are typically found occupying space and utilizing facilities in conjunction with students in two or more high school years. One important reason for this is the need for economical use of costly space-provisions and facilities. Investigation has shown that a junior college cannot be economically self-sufficient in respect to plant and facilities before it has an enrollment of about a thousand students.⁸ The significance of this conclusion when applied to the problem of organizational relationship of the junior colleges for whites indicated for the counties of Maryland is apparent as soon as one recalls their predicted size; twelve were indicated as likely to be "small," four as "medium," and only five as "large". Even the prospectively

⁸ Leonard V. Koos, *Integrating High School and College: The Six-Four-Four Plan at Work* (New York: Harper & Bros., 1946), pp. 175-79.

large ones (in Allegany, Frederick, Montgomery, Prince George's, and Washington Counties) will not reach enrollments of a thousand full-time students in the two junior college years for many years, if ever. The expedience of either association or integration with high school years is apparent.

However, the issue of organization is far from one merely of economical provision of opportunities at the junior college level, notwithstanding its great importance. It is even more a question of the educational preferability of integration through the 6-4-4 plan or of association. Some of the educational advantages of the 6-4-4 plan that are established in fact may be briefly reviewed.⁹

(1) The four-year junior high school in the 6-4-4 plan has been found superior to the three-year junior high school, which in turn has an established superiority over these grades when organized under the 8-4 plan.

(2) The four-year junior college unit tends to bring with it a broadened curriculum for both levels represented and much improved articulation of these levels.

(3) The four-year junior college, through its continuous program of guidance, tends to hold larger proportions of students through the junior college years and to serve these students better.

(4) Continuity of membership over a longer period of years in student organizations makes participation in them more significant educationally.

(5) The fact that most instructors in four-year junior colleges teach at both high school and junior college levels is the best possible assurance of intimate vertical articulation of courses. Because teachers at the junior college level are required to have more extended preparation, as measured by degrees held or years of graduate study, the fact that they teach at both levels makes it possible for students at the high school level in these organizations to be taught by better-prepared teachers.

⁹ Summary based on Leonard V. Koos, *op. cit.*, pp. 187-90.

The same investigation found the associations on the 3-2 or 4-2 basis sharing in these advantages of the 6-4-4 plan, but not to the same degree.¹⁰

Junior High School Reorganization in Maryland

The feasibility and the rate of reorganization toward the 6-4-4 plan, if this plan is considered desirable in the state, would be affected by the extent and rate of reorganization toward the 6-3-3 plan, which involves establishing three-year junior high schools and three-year senior high schools, or six-year junior-senior high schools. Facts supplied by the State Department of Education disclose steady progress in this direction. Over the period of twenty years from 1926 to 1946, the number of white four-year high schools in the twenty-three counties of Maryland dropped from 114 to 21, while the number of junior high schools increased from 1 to 29; of junior-senior schools, from 4 to 96; and separate senior high schools, from 1 to 5. The trend for Negro high schools was not so rapid, but was, nevertheless, notable. Junior high school reorganization may well be considered as a first long step toward the 6-4-4 plan, which, to be attained, would require two more steps. One of these is the addition to senior high schools of the two junior college grades; and the other is the shifting of grade ten to the junior high school groups.

The locations of the four-year junior colleges in Maryland, should commitment be made to the 6-4-4 plan, would be identical with those tentatively indicated in foregoing sections of this report. The task of locating the four-year junior high schools, of which there must be many more than of the junior colleges, would involve extensive and intensive inquiry not within the scope of the present project. Contact with other projects in which this problem was investigated suggests the feasibility in the counties in the state as a whole of a workable distribution of junior high school units.

¹⁰ Koos, *op. cit.*, pp. 190-92.

The State Teachers Colleges as Junior Colleges

The review in the early portions of this chapter of junior college development to date in Maryland included reference to the junior college service being rendered at the state teachers colleges. For white students, three institutions were named, the locations being at Frostburg in Allegany County, Towson in Baltimore County, and Salisbury in Wicomico County. The previous mention referred to the introduction of the junior college service in the first and third of these institutions in 1935 and in the second in 1946, and it may be stated that, in order better to accommodate returning veterans not interested in preparation for teaching, the "arts and sciences" offering has recently been enlarged to some extent. The desirability, from the standpoint of long-time junior college policy (and not from teacher-education policy, which is not the concern of this particular chapter), of continuance of this service is here given brief consideration.

(1) The heavy concentration of prospective junior college students in the Cumberland community, as evidenced by the large high school enrollment there, clearly indicates this city as the preferable location of a junior college to serve Allegany County. After ten years of operation of the junior college curriculum in the Frostburg State Teachers College and in a year (1946) when enrollment of veterans must be approaching its peak, only 34 graduates of the public high schools in Cumberland—which had 2,176 students enrolled in the four traditional high school years in 1943-44—entered that institution. This number was not even as large as the 36 students coming from Beall High School at Frostburg, although Beall's enrollment (in the four traditional high school years) was only 799. It would be much more economical of public resources and of students' time to provide for the transportation of the few junior college students from Frostburg over the eleven miles to Cumberland than to transport the large number of students from Cumberland in the opposite direction. Further, the total number of Cumberland junior college students would be very much larger with the

junior college located in Cumberland. The almost strictly local, rather than regional, service of Frostburg State Teachers College is established by the fact that, of the total of 136 freshmen in 1946, 111 come from Allegany County, 18 from other counties in Maryland, and 7 from outside the state.

(2) A salient fact about the junior college enrollment in 1946 in the Towson State Teachers College is that 67 of the 109 freshmen (of whom 60 are veterans) are from Baltimore City, with 57 of them graduates of schools in that city. As will be seen below, this report assumes that Baltimore City will maintain its own junior colleges and, when the development takes place, this source of junior college students at Towson State Teachers College will dry up. Most remaining junior college freshmen at Towson—33, in fact—report their residence as Baltimore County, with only 8 reporting residence in other counties and 1 in another state. Thus, so far as its junior college students are concerned, this institution is almost exclusively local and only in slight degree regional.

(3) The distribution of freshmen at Salisbury State Teachers College, as shown by their counties of residence, is much more widespread than for Frostburg and Towson. Fifty-five of the 145 freshmen (113 in arts and sciences and 32 in teacher-training curriculums) are from Wicomico County. All but a single student, who is from outside the state, of all remaining freshmen, are from thirteen other counties. Largest numbers, of course, come from the adjoining counties of Dorchester (12 students), Somerset (18), and Worcester (18). This institution is thus more nearly regional in its service than are Frostburg and Towson. At the same time, the total number from each of the adjoining counties is not so large as to set aside the policy of localism for junior colleges being applied in this report, except to the degree suggested in the statements concerning Somerset and Wicomico Counties in the county-by-county canvass above. Further comment on this institution that seems important would concern the plans for the development of several new curriculums announced to be made available in September

1947. Certain of these are two-year curriculums and designated as "either terminal or transfer," while others are to be one-year terminal in type.

Suggestions made earlier in this report are for local public junior colleges at Towson and Salisbury as parts of county school systems. This is in harmony with a desirable long-time policy in the development of junior colleges. The investigator is aware that some persons may take exception to this suggestion and, while agreeing with the policy for other counties in the state, urge making exceptions in these instances and permitting the teachers colleges to continue and expand at least their local service as junior colleges. If continuance is permitted, it should be done with full awareness of the deviation from the dominating policy of localism and the losses that will be entailed to a fully developed and well-articulated local system of schools.

Junior Colleges for Baltimore City

The explanation for saying very little in this report up to this point concerning the junior college problem in Baltimore City is that information and conditions are sufficiently different to warrant special consideration. This brief section will consider the need for junior colleges, the probable number of junior colleges that are indicated, and the organizational relationships of these junior college centers to the school levels below.

The percentage of the eighteen-to-twenty age group in Baltimore City, reported by the *U. S. Census, 1940* as attending school (see Table 51), is 17.3. This percentage is fifth in size from the highest when compared with the percentages for the twenty-three counties of Maryland and may at first impress one as being relatively large. However, it is slightly under the proportion reported for the whole state in Table 51, and it will be recalled that Maryland ranked very low in comparison with other states. The percentage in Baltimore City is thus relatively low, as compared with the country

as a whole, in the proportion of this age group attending school. Because the proportion is low despite the presence in the city of a number of higher institutions, a program of further development of educational opportunities in the way of free-tuition junior colleges seems essential in order to make education for this age level more readily available.

Although follow-up studies of graduates of Baltimore high schools have been made, the evidence is not directly comparable with that reported earlier for the twenty-three counties.

The number attending the seven white high schools in Baltimore during 1943-44 was almost 10,000. In 1940, it was slightly over this number. The number of graduates of these schools in 1944 was 2,190, and in 1940, a pre-war year, 2,984, or almost three thousand. Numbers attending and graduating during normal years should assure a junior college enrollment large enough to justify establishment and maintenance of at least two or three junior colleges of large enrollment, as previously defined.

The recommendation of two or three junior colleges is made for two reasons. The first of these is that proximity is a potent factor of attendance on opportunities for education in large cities as it is in communities of smaller population, or there would not be maintained so many high schools in these cities. Chicago has three junior colleges, not counting three evening junior colleges in other locations, and the report to a legislative commission two years ago urged the addition of two or three more. Los Angeles which had only one junior-college center—Los Angeles City College—has recently been committed to providing three more in different sections of the school district.

The second reason for recommending two or three, or even more junior college centers for white students is the desirability of more than one huge center in working out a commendable organizational pattern for the system. Baltimore City, like many counties of the state, has made considerable progress in junior high school reorganization, and a natural

next step in organizational development might well be the 6-4-4 plan, calling for two to several upper four-year units.

The numbers of Negro students reported as attending high schools in Baltimore City and graduating from them were respectively in 1944, 1,735 and 385. These numbers indicate a junior college center for this group.

Indications for Baltimore City cannot here be more specific than as set down. Specific recommendations for a city as large as Baltimore must be preceded by extensive and intensive inquiry, which has been out of the question for this report.

Junior College Opportunities for Negroes Outside Baltimore City

Feasibility of establishing junior colleges for Negroes may be decided by the same procedure used for junior colleges for the white population. The distribution by size of enrollment of the public high schools for Negroes outside of Baltimore is presented in Table 56. Of the thirty high schools, only a single one, the Wiley Bates High School at Annapolis, had an enrollment in excess of 600 students, indicating something like feasibility of establishing a Negro unit in that

TABLE 56
DISTRIBUTIONS BY SIZE OF ENROLLMENT IN 1943-44 OF PUBLIC
HIGH SCHOOLS FOR NEGROES IN THE COUNTIES OF MARYLAND

Enrollment	Number
Fewer than 100.....	7
100-199.....	17
200-299.....	3
300-399.....	2
400-499.....	..
500-599.....	..
600-699.....	1
Total.....	<hr/> 30

community. The next largest high schools are two having 300 to 399 students and are below the point of feasibility used for junior colleges for white students. Little assurance of feasibility is added by inquiry into the counties of location of these high schools to ascertain in how many counties the number of students in all Negro high schools might point to feasibility. Such inquiry shows that the total enrollments in only four additional counties, namely, Baltimore County, Charles, Prince George's, and Wicomico, were as large as 300 to 400 students. Because these are wartime enrollments, the situation in a period of peak enrollments might be appreciably better.

The situation as described presents serious difficulties for any earnest effort to equalize opportunities for Negroes at this level with those for white students. Two methods suggest themselves, to both of which it seems necessary to resort. One of these is the same as that previously suggested for communities beyond commuting distance from junior college units for white students and for students in counties without junior colleges, and that is to make attendance possible by subsidization for subsistence away from home. This could be done for prospective students wishing to attend a Negro public junior college or one of the state colleges for Negroes, Bowie State Teachers College or Princess Anne College, both of which maintain junior college curriculums in addition to four-year college programs. Because of the small numbers of Negroes in many counties, this method would need to be used for greater proportions, although not greater numbers, of Negro than white students.

The other method would be to apply a somewhat smaller criterion of high school enrollment for feasibility for establishing a junior college for Negroes. This method would increase the number of junior colleges, but they would obviously be smaller units with a higher average cost per student per year than in larger units. The danger in encouraging such smaller units is that the offering in them would be more meager, and, unless carefully administered, they might be weak in other respects. Some such adjustment might be

warranted because the cost per student, although higher than in large units, would still be less than would be the subsidy for subsistence away from home.

FINANCING THE JUNIOR COLLEGES

The Cost per Student per Year

This section of the report, concerned with the problem of financing the system of junior colleges projected in the foregoing section, must arrive first at a working figure of cost per student per year and from this, derive total costs, estimate basic state aid and amounts to be raised locally, and compute increases to local tax rates which these amounts would entail. Recommendations in procedures in financing will arise out of the interpretation of the various computations.

The projected probable costs per student per year at the junior college level to be used here must be rough estimates, even though they are far from pure guesses. They take into account current expense costs per high school pupil in various counties of the state, the distributions of annual salaries of high school teachers in several counties, and experience as to the approximate ratio of junior college costs to high school costs. Per pupil costs in 1945 in twenty-two large high schools in Maryland, for which figures were at hand, ranged from \$76.59 to \$180.49, with a median of about \$107. This is for current expense only and does not include depreciation of plants which must ultimately be replaced. A working figure for over-all cost for most counties approaches \$200 per student per year which includes consideration of the following factors: additions for replacement of plant (which must be taken into account in any long-time junior college policy); a somewhat greater cost for transportation because the proportions of junior college students transported will be larger and distances somewhat longer than at lower levels; and a somewhat smaller student-teacher ratio, especially during the earlier stages of junior college development. The greater cost per high school student in Montgomery County (\$145.58

at Bethesda-Chevy Chase and \$180.49 at Montgomery Blair), with the higher distribution of high school teachers' salaries there, warrant setting the probable junior college cost for that county at \$250 per student. An identical figure will be used below in the separate treatment of the junior college financial problem in Baltimore City.

Projecting Total Costs, State Aid, and Local Taxation for Junior Colleges

The projection of total costs for each of the twenty-three counties of the state may be considered in connection with the estimates and computations presented in Table 57.

(1) The first column presents the numbers of junior college students estimated for each county; the second column projects total costs for these students at the estimated costs per student just set down. The numbers of students are approximately a fifth of the total high school enrollments to be found in the last column of Table 55. This is a smaller proportion than the average of one-third that free-tuition junior college enrollments in midwestern and California communities with long-established units were of high school enrollments in the districts of location in 1940,¹¹ but reduction is called for by the generally larger proportions than in Maryland of college-going youth. To some persons the proportion here applied may appear unduly optimistic and to others pessimistic. To the investigator it seems a fair general estimate for Maryland after free local public junior colleges have been in operation for a period of two or three years. The proportion should in time increase beyond a fifth of the high school enrollment, and the predictions of sizes of junior colleges in the foregoing section, "Where and How to Organize Junior Colleges," assume this increase.

For the sake of simplicity and because the figures are only estimates, they are given in round numbers. Estimates are provided for all counties, even including those for which no junior colleges were indicated in the foregoing sections; this

¹¹ Leonard V. Koos, "How to Democratize the Junior-College Level," *School Review*, LII (May 1944), 281.

TABLE 57

PROJECTION OF NUMBERS OF JUNIOR COLLEGE STUDENTS (TWO OR THREE YEARS AFTER ESTABLISHMENT OF THE INSTITUTION), TOTAL COSTS, STATE AID, AND INCREASES IN SCHOOL TAX RATES FOR MAINTAINING FREE LOCAL PUBLIC JUNIOR COLLEGES IN MARYLAND

COUNTY	NUMBER OF STUDENTS AFTER 2 OR 3 YEARS	TOTAL COST	BASIC STATE AID					BALANCE TO BE RAISED LOCALLY	ASSESSABLE BASIS TAXABLE, 1945 (THOUSANDS)	SCHOOL TAX RATE 1945-46	ADDITIONAL TAX RATE	PER-CENTAGE ADDITION TO LOCAL RATE	ASSESSED VALUATION PER STUDENT (THOUSANDS)
			Teachers		Amount of Aid	Aid for Students	Total						
			Number										
Allegany.....	800	\$160,000	40	\$16,000	\$16,000	\$32,000	\$128,000	\$ 95,812	1.109	.134	12	\$120	
Anne Arundel..	500	100,000	25	10,000	10,000	20,000	80,000	72,224	1.107	.118	11	144	
Baltimore.....	1,200	240,000	60	24,000	24,000	48,000	192,000	362,204	.556	.053	10	302	
Calvert.....	50	10,000	3	1,200	900	2,100	7,900	7,475	.866	.106	12	150	
Caroline.....	150	30,000	10	4,000	3,000	7,000	23,000	16,625	.645	.137	21	111	
Carroll.....	300	60,000	20	8,000	6,000	14,000	46,000	46,612	.609	.099	16	155	
Cecil.....	200	40,000	13	5,200	4,000	9,200	30,800	54,621	.633	.056	9	273	
Charles.....	100	20,000	7	2,800	2,000	4,800	15,200	14,109	.724	.108	15	141	
Dorchester.....	175	35,000	12	4,800	3,500	8,300	26,700	27,541	.780	.097	12	157	
Frederick.....	500	100,000	25	10,000	10,000	20,000	80,000	73,607	.763	.109	14	147	
Garrett.....	225	45,000	15	6,000	4,500	10,500	34,500	19,755	.805	.175	20	147	
Harford.....	300	60,000	20	8,000	6,000	14,000	46,000	74,637	.584	.062	11	249	
Howard.....	125	25,000	8	3,200	2,500	5,700	19,300	21,684	.929	.089	10	173	
Kent.....	100	20,000	7	2,800	2,000	4,800	15,200	18,600	.688	.082	12	186	
Montgomery....	500	125,000	25	10,000	10,000	20,000	105,000	81,733	.925	.058	6	364	
Prince George's	700	140,000	37	14,800	14,000	28,800	111,200	147,564	.900	.075	8	211	
Queen Anne's..	50	10,000	3	1,200	1,000	2,200	7,800	18,013	.736	.043	6	360	
St. Mary's.....	75	15,000	5	2,000	1,500	3,500	11,500	11,252	.514	.102	20	150	
Somerset.....	100	20,000	7	2,800	2,000	4,800	15,200	13,194	.652	.115	18	132	
Talbot.....	100	20,000	7	2,800	2,000	4,800	15,200	23,606	.647	.064	10	236	
Washington....	500	100,000	25	10,000	10,000	20,000	80,000	100,783	.859	.079	9	204	
Wicomico.....	225	45,000	15	6,000	4,500	10,500	40,500	38,480	.899	.105	12	171	
Worcester.....	125	25,000	8	3,200	2,500	5,700	19,300	23,627	.670	.082	12	189	

is on the assumption that students from these counties will attend junior colleges in nearby counties and that the counties of residence should reimburse the county of attendance for the cost. Students will surely attend in considerable numbers if, as is recommended, they are subsidized for subsistence when attending away from home. The estimate for Baltimore County includes students who, because of convenience in travel to attend junior colleges, might attend those in Baltimore City instead of those in Baltimore County.

The column of total cost is merely the product of multiplying the estimated cost per student by the number of students in the first column.

(2) The next four columns in Table 57 relate to basic state aid. The aid is projected in accordance with the recommendations of the recent *Report of the Maryland Commission on the Distribution of Tax Revenues*, usually referred to as the "Sherbow Report." The basis is here applied because of its simplicity and because of the possibility of its being implemented in legislation by the General Assembly. The basic state aid proposed in this report is \$400 per teacher and \$20 per pupil. The number of teachers for each county in the first three columns is the nearest whole number obtained by dividing the estimated number of students in the first column by 15 where the number of students is fewer than 400 and by 20 where it is 400 or more. The reason for the two different student-teacher ratios is that smaller junior colleges are not able to distribute students to classes as efficiently as larger junior colleges. The same tendency to difference is found between small and larger high schools. The amount of basic aid on the teacher basis is merely the product of multiplying \$400 by the number of teachers. The basic aid on the student basis is analogously derived, and the total is, of course, the sum of the two amounts for teachers and students. These totals are seen to range from \$2,100 for Calvert County to \$48,000 for Baltimore County.

(3) The next column shows the balance of cost for each county that would need to be raised by taxation in the school

district to support junior college work. The balance is obtained by subtracting the total basic aid from the total cost.

(4) The next two columns present, respectively, the assessable basis taxable for 1945 and the additional tax rate that would need to be levied in each county to provide the balance. The rate reported results from dividing the balance to be raised locally by the assessable basis. These additional rates are seen to range widely, from .043 to .175, with the highest more than four times the lowest and are indicative of much heavier burdens on some counties than on others for including junior college work in their educational programs.

(5) The two columns next following are introduced to bring out more clearly than the preceding one the proportionate increases to the local school tax rates that would result from supporting the junior college programs. The first of this pair of columns reports the school tax rates in 1945-46 and the second, the percentages which the addition for junior college purposes would be of the 1945-46 rates. These percentages range from 6 to 20. They, like the additions themselves, range widely, and both, where high, would work seriously to discourage establishment and maintenance of junior colleges.

(6) A final computation has been made for each county and is to be found in the last column of the table. This is the assessable valuation per prospective junior college student and results from dividing the total assessable basis by the predicted number of students in the first column. Here again is a wide variation, from \$111,000 to \$364,000 per student, which means that the wealthiest county (measured in this way) would have a tax base per student more than three times as large as the poorest county.

The wide variations in the additions to tax rates and percentages of increment that would be required (with some additions so large as to be prohibitive of junior college development) and in the valuation base per student point to the need for the same procedure in equalization as obtains for the lower schools. The recommendation seems entirely appropriate that junior college education be included within the scope

of the state's minimum program of education and that equalization funds be distributed on the same basis as for lower schools. After all, the amounts of basic state aid for all counties in the table total only about \$300,000, which seems a rather modest sum where more than seven thousand junior college students are being considered. This is only a little over \$40 of basic aid per student per year, of a total average per student cost that would exceed \$200.

Financial Problem for Baltimore City

It is even more difficult and hazardous to venture a prediction of junior college enrollments for a large industrialized population center like Baltimore City than for smaller cities, in part because the number of large cities with junior college experience is more limited. However, it is certain that the greater opportunities for employment tend to reduce the proportion of high school graduates who will continue in a junior college. Many graduates in Baltimore will wish, and will be financially able, to attend one or another of the existing higher institutions, a factor which will also work to reduce the junior college enrollment. It does not seem too optimistic, however, to assume, in view of the numbers of high school students and graduates of high schools, that in two or three years junior colleges for whites might enroll as many as a thousand students, and a junior college for Negroes as many as 200 students.

Application of the figure of \$250, previously mentioned for the city, as the cost per student per year, would place the total annual cost of local public junior colleges for Baltimore, after they have been in operation for two or three years, around \$300,000. Basic state aid for teachers for an estimated staff of sixty full-time members would be \$24,000, while the basic student aid would be \$24,000. This would leave a balance of cost, to be locally carried, of \$252,000. On the assessed valuation of Baltimore City in 1945, this outlay would mean an addition to the local tax rate for schools of .018, which would be only 2 percent of the calculated city

school tax rate of .900 in 1945-46, an increase much smaller than for any of the county districts for which computations were reported in Table 57.

The Financial Problem of Junior College Education for Negroes

The portion of this report identifying the communities with Negro high schools large enough to justify establishing junior college work found only one such high school outside of Baltimore City—the Wiley Bates High School at Annapolis. The scattered distribution of Negro high school students makes impossible predicting, with anything approaching reliability, local costs for Negro junior college education, however much it is desired to do so. Experience in this area is lacking and will be required before predictions can be made. As many Negro high school graduates from the various counties as wish junior college education should be served in such institutions as are provided, and, according to the plan suggested for white students from counties without junior colleges, cost of education should be charged against the county of residence. Allowance for subsistence for students while living away from home should also be made, but this, for Negroes just as for white students who must live away from home while attending at the junior college level, should come from state rather than local sources.

AUTHORIZATION AND REGULATION OF JUNIOR COLLEGES IN MARYLAND

Legal Authority for Establishing Junior College Work

Examination of the laws of the State of Maryland for authority to establish and maintain junior colleges under this specific title finds no reference to them by name. The laws do, nevertheless, contain a section that would appear to give authority to county boards of education to establish and maintain the junior college level of work. The authorization is contained in a new section, enacted by the General Assembly and approved in 1945, added to article 77 of the An-

notated Code of Maryland (1939 edition). The section reads as follows:

41 A. The County Board of Education, in accordance with the rules and regulations of the State Department of Education, may establish and maintain day and evening schools for adults, the purposes of which shall be to provide a general program of continuing education in all its aspects for the improvement of the civic, vocational, and general intelligence of adults, and to enable them to make a wise use of their leisure time.

The sole change in this law or others pertaining to education that would seem to be necessary from the standpoint of foregoing portions of this report is to have this "program of continuing education" recognized as part of the state minimum program of education, in order to have expenditures in the counties for it share in the equalization fund. The definition seems to be broad enough to allow for a comprehensive program at the junior college level.

Regulation and Control of the Junior Colleges

The same section of the Maryland law, in the phrase "in accordance with the rules and regulations of the State Department of Education," establishes that department as the agency of regulation and accreditation. The department had previously formulated and applied definitions and standards for the junior college "as a two-year post-high school institution or as a four-year institution which includes the last two years of high school and two years of post-high-school work"; or "independent of other administrative units . . . associated with a recognized secondary school, or . . . a unit within a recognized college or university."¹²

It may be needless to state that the respective functions of county boards of education and of the State Department of Education would hardly be different for the junior college level than for elementary school and high school levels. The department would serve as the state supervisory agency and the county boards would have basically the same authority

¹² "Recognition by Accrediting Agencies," Maryland State Department of Education, 1939.

in matters of organization, curriculum, appointment of staffs, and the like that they now possess over lower schools.

This designation of the central state educational authority as the agency of regulation and control of junior colleges is in accord with recent legislation in other states. Identification of accrediting agencies for junior colleges in the formulations of accrediting procedures in twenty-eight states found fourteen to be state boards; nine, state departments of education; three, state universities; and two, other agencies. This situation represents a marked shift from earlier procedures in accreditation, in which the state university was much more frequently the agency in control. The shift has in all probability been brought about by the broadening conception of function of the junior college, which is rapidly coming to be concerned with the education of all youth of this age level, rather than with the preparatory group only.

Although authority for regulation of junior colleges is vested in the State Department of Education, it may be advisable, in the earlier rapid stages of development of junior colleges, or longer, for the department to arrange for an advisory committee of representatives of higher institutions on preparatory curriculums. This committee could to advantage be consulted as a group by the State Department of Education and administrators in the county systems in order to facilitate transfer of junior college graduates and other junior college students to the higher institutions of the state.

A JUNIOR COLLEGE POLICY FOR MARYLAND

From the foregoing evidence and discussion of the need for junior colleges in the state, consideration of where and how to organize these units, and study of the problems of financing and regulating them, certain implications emerge. The implications may be regarded as elements in a desirable state policy in the development of junior colleges. Following are brief formulations of the most important of these elements.

1. Proportions of youth of junior college age attending school and of high school graduates continuing their educa-

tion have been so small in Maryland that free-tuition opportunities for education at the junior college level near the homes of prospective students should be provided. Comparison with conditions elsewhere convinces that distance and tuition charges are serious obstacles to continuance of education.

2. To be most effective in democratizing, or universalizing, this level of education, the junior college should be established and operated as part of the local school system. The county district system in Maryland, together with the relatively compact distribution of the population, and therefore of prospective students, seems almost made to order for establishing this type of institution. An accessible distribution of junior college units for white students seems feasible, with only minor deviations from a policy of localism in establishment.

3. The exceptions to complete application of a policy of localism for white students would be the maintenance of a single junior college for two counties in two instances and, because of lack of feasibility for the present, omission of junior college units from two other counties, one of which has a state junior college for women. The smaller numbers of prospective Negro students for the time being prevents complete application of a policy of localism for this group of the population. Students from counties without junior colleges, as well as students in counties with junior colleges who live at noncommuting distances from junior colleges, should be subsidized for subsistence when living away from home while attending.

4. In order to serve well all youth who will attend, the programs of these junior colleges should include both preparatory and terminal curriculums. The terminal work should be both general and occupational.

5. A working minimum enrollment in junior college years of 175 to 200 has been assumed for this report. It may require a few to several years to attain this minimum in some of the situations for which it has been indicated.

6. Projected enrollments of junior colleges indicated in the main body of this report as feasible of establishment are of such a size that all should be developed in association or integration with high school years. None promises for many years to be large enough to be self-sufficient in respect to plant, facilities, and faculty. Associations are usually on a 3-2 or 4-2 basis (two-year junior colleges housed with three-year or four-year high schools) and integration involves a four-year unit including grades eleven to fourteen, in systems operating on the 6-4-4 plan.

7. Association or integration of junior college with high school years is much more than a matter of expediency and financial economy, as associated junior colleges have educational advantages over separate units, and four-year junior colleges, in turn, are superior to the association type. Progress of junior high school reorganization in Maryland in recent years, joined with upward extension to include junior college years, would make the 6-4-4 plan the natural next step in developing the system.

8. Recommendation for establishment of local public junior colleges extends to Baltimore City, for which at least two or three units for white students and one for Negroes is indicated.

9. To encourage establishment of junior colleges, they should share in the basic state aid just as do the lower schools. Beyond this, they should participate in equalization funds by being made a part of the state's minimum school program.

10. A section added in 1945 to Maryland laws on education, authorizing provision for "continuing education," seems to provide authorization of junior college development in the county systems. As has just been intimated, further legislation would be necessary to make junior college work a part of the state's minimum program in order to have expenditures in the counties for this purpose share in the equalization fund.

11. The same section of the law just referred to appropriately places the State Department of Education in control of "continuing education." In this control the respective func-

tions of county boards of education and of the State Department of Education would not be different for the junior college level than for elementary school and high school levels, although, during early stages of the development, the State Department of Education might find it desirable to secure the advice of representatives of higher institutions concerning preparatory programs.

VIII. INSTITUTIONAL UNITS NEEDED FOR HIGHER EDUCATION IN MARYLAND

The State of Maryland maintains eight institutions of higher education under its direct control, five for white students and three for Negroes. All these offer four years of academic work, and all except one—St. Mary's Female Seminary—offer degrees. In addition, Maryland makes grants of public funds to four other degree-granting institutions. The state thus helps to support a total of twelve different institutions of higher education. The City of Baltimore maintains Coppin Teachers College for the preparation of Negro elementary teachers, making a total of thirteen institutions maintained under public support with four-year programs in Maryland. Nine of these thirteen are publicly controlled. As will be recalled in the discussion in a preceding chapter, Maryland is a state in which the privately controlled institutions of higher education have predominated in the past; there are fifteen institutions in the state which receive no support from public funds and are under private control.

The number of publicly supported and publicly controlled institutions with four-year programs in Maryland seems excessive for a state with less than two million population and a relatively small geographic area. The maintenance of separate institutions for Negro students complicates the situation in Maryland so that comparisons can be drawn only with other states which also follow the policy of segregating the races for educational purposes. Of the five such states which are roughly comparable to Maryland in total population, only Oklahoma approaches Maryland in the number of publicly supported institutions that are maintained with four-year programs. Oklahoma has eleven such institutions, but its population is 28 percent larger than that of Maryland, and its territory is much more extensive. Furthermore, there are few privately controlled institutions of any strength in Oklahoma.

The number of publicly supported institutions of higher education with four-year programs in the other southern states of approximately the same population as Maryland are

as follows: Florida, three; Arkansas, six; South Carolina and Mississippi, seven each. Among the southern states having considerably larger populations than Maryland, the number of publicly supported institutions of higher education with four-year programs is as follows: Kentucky, Louisiana, and Tennessee, seven each; Georgia and Missouri, eight each; Alabama and Virginia, nine each; North Carolina, eleven; and Texas, fifteen. Surveys in several of these states have recommended a reduction in the number of publicly supported institutions with four-year programs. While these comparisons do not definitely prove that Maryland maintains too many institutions of higher education, at least they suggest that serious inquiry needs to be made into the possibility of reducing the number of separate institutions maintained through public support in this state.

FACTORS AFFECTING THE NEED FOR INSTITUTIONAL UNITS

The need for separate institutional units maintaining programs of higher education is in part determined by geographical factors. Students tend to go to college much more readily when there is an institution near them than when they must travel long distances. The local effect of an institution on college attendance, however, is distinctly limited; the influence is chiefly felt within a ten-mile radius and, according to careful studies, the presence of an institution has scarcely any effect on college attendance by those who live more than twenty miles from it. It is manifestly impossible for the State of Maryland, or for most other states, to maintain four-year degree-granting institutions within twenty or twenty-five miles of every prospective student. It is necessary, however, to consider geographical concentrations of population in determining the locations where institutions can most advantageously serve the young people of the state. For example, the Eastern Shore is an area that is sufficiently distinct from the rest of Maryland to require the maintenance of one or more educational institutions in that area.

Another general factor that needs to have consideration in determining the need for institutional units is the desirable

size for an institution. Previous investigations have shown that colleges with small enrollments are inordinately expensive per student, if a program of satisfactory quality is maintained. The studies made of this problem show that a degree-granting institution offering a general program of liberal arts does not approach the point of efficient operation until it enrolls in the neighborhood of 750 or more students. Similar studies have not been made for specialized institutions such as teachers colleges, but inasmuch as their programs are in many respects like those of liberal arts colleges, the possibilities are that the point of efficient operation for such institutions is not far below 750 students. A junior college, on the contrary, because of the limitation of its program to a much narrower range of courses and the possibility of its being housed in association or integration with a high school, can operate efficiently with a much smaller number of students.

The reasons for inefficient operation in a small four-year college are readily apparent. For any size of student body below 750 the academic facilities must be about the same. That is, there is no reduction corresponding to the smaller enrollment in the needs for library books, or for library service, or for science laboratories, or for administrative staff, or for gymnasium or other facilities for physical education, etc. If a suitable array of advanced courses is offered, the number of faculty members cannot be reduced proportionately to the size of enrollment in institutions below 750 students. Since the smaller institution, to maintain an educational program of satisfactory quality, must spend almost as much money as one with 750 students, the cost per student in the small institution is almost certain to be excessive. In other words, a dollar's worth of expenditure in a small institution does not buy as much education as it does in one with enrollment of suitable size.

In a previous chapter the data have been presented showing the expenditures per student in the Maryland institutions. In that connection it was pointed out that the costs are high in many of the colleges because of the small enrollments. The state could clearly get more education for the

money it provides if the services were concentrated in fewer institutions.

The possibility of an institution becoming too large for efficient operation also needs consideration. Unfortunately there have been no studies that would show the point at which an institution's enrollment may become so large as to interfere with efficient management. In the past there have been few institutions of higher education in this country that have approached such a point, although it is generally known from cost studies relating to other kinds of organizations that excessive size often results in inefficient operation. The intense crowding of universities that has occurred in the autumn of 1946 has raised a serious question about the point at which it would be wise to limit enrollments and to create new institutions rather than allow an overcrowded university to expand indefinitely. Although no accurate conclusions can be drawn, it may be suggested that an enrollment of 10,000 students on a single campus is probably about the upper limit for efficient operation. In Maryland only the state university is beginning to approach such an enrollment figure.

The autumn of 1946 is an excellent time to test the capacity of institutions for service to students. All over the country there have been unprecedented increases in the demands for entrance into college, and certain of the Maryland institutions, particularly the University of Maryland and Morgan State College, have been swamped by the numbers of students who wish to attend. Any institution that has been unable to attract an enrollment that taxes the maximum capacity of its facilities in the autumn of 1946 probably will never be able to attract a large student body without some radical change in program or facilities or location. Some of the Maryland institutions are not filled to capacity this autumn.

Another factor that must be considered in appraising the necessity of maintaining any institutional unit for higher education concerns the kinds of service to be rendered. The state-supported program of higher education in Maryland is remarkably free from objectionable duplication in services.

The maintenance of lower division or freshman and sophomore programs in liberal arts in a considerable number of different institutions can readily be defended, for the bulk of the students to be served are at this level and classes are almost certain to be of economical size. Upper division programs in liberal arts are maintained for white students in Maryland only at the University of Maryland and for Negro students only at Morgan College. The programs of professional education for white students are also concentrated at the University of Maryland with the exception of the preparation of teachers for the elementary schools. This latter type of program is the only one in the state maintained in more than one institution. There are three state teachers colleges engaged in the preparation of elementary school teachers, and the University of Maryland also offers a curriculum in this field. Two institutions for Negro students—one state controlled, and one under the control of the City of Baltimore—are maintained for the preparation of elementary school teachers.

Another important consideration in determining the institutions to be maintained under public auspices in any state is the strength of the existing institutions. It seems obvious that the state should maintain only such institutions as are of standard quality. The quality of the program of an institution is best indicated by the kind of accreditation it has received. Previously in this survey report it has been shown that several of the Maryland institutions lack national or regional accreditation. The state is rendering a service of doubtful value to its young people in maintaining any educational program that does not meet national or regional standards of accreditation. It would be clearly better to maintain fewer institutions of higher quality than to disperse the efforts of the state among a larger number of institutions, some of which are of inferior quality as judged by accredited status. The continuance of any institution is questionable if it has been operating long enough to be eligible for accredita-

tion and has not up to the present attained this recognized status.

In summary, Maryland maintains more state-controlled institutions of higher education than any other similarly situated state of comparable size and population. Many of the Maryland colleges are too small for efficient operation. Even in the autumn of 1946, when all over the country the facilities of institutions of higher education are being taxed to their utmost to take care of the unprecedented increases in enrollments, some of the Maryland degree-granting colleges have fewer students than their capacity. Some of these institutions have not achieved national or regional accreditation and thus are rendering a service that would not be recognized as of standard quality.

POSSIBLE REASSIGNMENTS OF SERVICES IN THE INTEREST OF GREATER EFFICIENCY

The foregoing considerations clearly point to the possibility of some reorganization of the institutional pattern of higher education in Maryland so as to yield greater education returns for the money that the state provides. Certain possibilities for development along such lines might well be examined critically.

Junior Colleges

The junior college is an efficient method of supplying a type of education that is in great demand. Not only is the cost per student for maintaining the junior college program lower than that for a degree-granting institution, but the cost to the student who can usually live at home is also much less for the local junior college than for other types of educational institutions. The possibilities of development of junior colleges in Maryland have been discussed at length in a preceding chapter. The conclusion is clear that every encouragement should be given to the counties and to Baltimore City to develop junior colleges as a part of their educational service.

Public Support of Privately Controlled Institutions

In chapter iv an extensive discussion was presented dealing with the grants made to privately controlled institutions in return for scholarship awards. It was shown in that connection that in most of these institutions the cost to the state for each scholarship provided is much greater than the average cost of educating a student at the University of Maryland, when the grants are considered as only a support for scholarships. Whether the state wants to provide support from public funds to institutions that are privately controlled should be decided as a matter of public policy. The evidence seems clear that this is not an economical method of providing higher education for the youth of the state.

One of the institutions which receives support from the state and which is not fully under public control seems to constitute a special case. Washington College has an important element of public control, in that twelve of its twenty-five board members are appointed by the governor. Furthermore, this institution in many respects operates like a state college. It gives residents of Maryland a lower tuition fee than is charged the residents of other states. It has not accumulated endowment funds, nor has it developed private sources of continuing support for current purposes. It would seem desirable to clarify the somewhat anomalous status of the control of Washington College. During the 1930's this institution lost an opportunity for significant expansions of its physical plant from federal funds, because of the ruling that it was not a publicly controlled college.

The present status of Washington College might readily be cleared up by making the institution definitely a part of the state system of higher education. If it is desired to retain some element of alumni control, alumni trustees could be appointed by the governor from a slate of three or more candidates for each position, such a slate to be drawn up by the appropriate representatives of the alumni. Such a plan is now followed in certain midwestern state-controlled institutions. The Eastern Shore of Maryland is a sufficiently distinct geographical area to require the maintenance of a sepa-

rate institution at the degree-granting level. The state can well afford to take over the responsibility for the support of Washington College as a service to the population on the Eastern Shore.

St. Mary's Female Seminary

The maintenance by the state of a very small, single-sex school in a remote section of southern Maryland is open to serious question. The only valid argument for maintaining St. Mary's Female Seminary is based on sentiment; this institution was founded in 1839 to commemorate the landing of Lord Calvert 200 years earlier at that point. Such a monument is expensive in that location. The continuance of a separate school for women is distinctly contrary to modern trends in the publicly supported institutions of the United States. The program at St. Mary's Female Seminary is not strong, as is evidenced by the fact that the junior college has not yet received regional accreditation. The cost per student is excessively high, especially for a program too weak to be accredited. There would seem to be no possibility whatever of developing this institution to the point where it would serve many more than the present enrollment of approximately ninety students. Furthermore, any significant expansion in enrollments would involve plant developments that would be relatively costly. If St. Mary's Female Seminary were discontinued as a part of the publicly supported system of education in Maryland, there would be very few persons whose opportunity for education would be affected adversely.

State Teachers Colleges for White Students

Three institutions are maintained for the preparation of white students as elementary school teachers. The largest is Towson State Teachers College located in a suburb of Baltimore. The other two are both very small, located respectively in Salisbury on the Eastern Shore and in Frostburg in the extreme western part of the state. All three of these institutions now maintain junior college programs of general

education, and a substantial part of the total enrollments at Salisbury and Frostburg State Teachers Colleges are in the junior college curriculum rather than in teacher preparation. The combined enrollment of the three institutions, so far as students preparing for teaching is concerned, is certainly not large enough to warrant the maintenance of more than one teachers college. If the state teachers colleges were producing all the elementary teachers required to maintain the Maryland schools, the number of students would not be too large to be handled in one institution.

The development of junior college facilities in the state teachers colleges should be commended as a temporary expedient to serve certain local students at a time when other facilities were unavailable. As has been pointed out in a previous chapter, however, this is not the best method of providing junior college service to a local area. It would be preferable to encourage the development of junior colleges as a part of the public school systems, rather than as adjuncts to the programs of specialized degree-granting institutions.

The plant at Towson is excellent and the institution is located so as to serve effectively a student body drawn from the entire state. There would be great economy in operation if all the preparation of white elementary teachers were concentrated at Towson State Teachers College. Perhaps it may be necessary to continue the maintenance of an elementary-teacher education program at Salisbury to care for the needs of the population on the Eastern Shore, since that area is somewhat isolated geographically from the rest of the state. If that is done, the state will merely have to recognize that the maintenance of a college too small for efficient operation is part of the price it pays for its peculiar geographical situation.

The State Teachers College at Frostburg, as was pointed out in the chapter on physical plant, must be moved to some new location if it is to be continued and developed. The state thus faces the necessity of a relatively large outlay for a completely new plant if a state teachers college is maintained in the Frostburg area. The Frostburg State Teachers College

has not attained either national or regional accreditation. A large proportion of the students at Frostburg are in the junior college curriculum, and the number preparing for teaching is small. Even with the junior college students, the enrollment at Frostburg State Teachers College is far below the number that is desirable for economic operation.

The needs for higher education of the great bulk of the young people in Western Maryland could be met adequately by a junior college maintained under the county school system and located in or near Cumberland. For the state to maintain another degree-granting institution at or near Frostburg, for the sake of the few young people in that area who wish to prepare for elementary school teaching, is most uneconomical. It would be far cheaper to pay these young people a differential in travel costs that would permit them to attend Towson State Teachers College.

University of Maryland

There can be no question about the continuance of the University of Maryland as part of the state system of higher education. This institution is now well established and has attracted a student body comparable in size to that of the other state universities throughout the country. Its program has steadily increased in strength.

Consideration should be given to the setting up of an upper limit for the number of students at the University of Maryland. Encouragement of the development of locally controlled junior colleges would do much to relieve the University of pressures from lower division students and would permit it to concentrate its efforts chiefly on upper division and graduate-level programs.

Some question has been raised about the wisdom of developing facilities for engineering education in the Baltimore area under the auspices of the University of Maryland. At present the City of Baltimore is served to some extent by the School of Engineering of Johns Hopkins University. If public support for the Johns Hopkins program were withdrawn, there would naturally arise a fear that the young men of the

metropolitan region would have their opportunities for engineering education diminished. Table 18, presented in chapter i, however, points out the fact that a very substantial number of Baltimore residents go to the University of Maryland for their engineering education. Furthermore, in a majority of the states the publicly controlled school of engineering is not located in the city of largest population.

One method which has been suggested for improving the situation is to move the engineering school of the University of Maryland to Baltimore and to develop it there rather than on the campus at College Park. This would be extremely expensive, and it would be unsound from an educational point of view, because engineering education needs to be maintained in close association with strong departments of science, economics, and other liberal arts subjects. The development of adequate junior college facilities in the City of Baltimore would do much to care for the needs for the technological education of the young people of that city who are unable to go to College Park for higher education.

Institutions for Negroes

The problem of the institutional units needed for service for Negro students is entirely separate from the problem for white students because of the policy of segregating the races for education. At present there are four publicly controlled institutions for Negroes in the state: Morgan State College, Princess Anne College, Bowie State Teachers College, and Coppin Teachers College. In view of the geographical area of the state and the size and distribution of its Negro population, the present pattern of colleges for Negroes is both educationally and financially inefficient. A reduction in the number of institutions for Negroes would make possible a more effective utilization of instructors and facilities, would promote a wide scope of offerings, would eliminate some duplication of offerings, would reduce the amount of overhead expenses arising from the operation and maintenance of programs on four separate campuses, and would make the various curriculums more readily accessible to the centers of Negro population in the state.

The survey staff found practically unanimous opinion to the effect that there is no further justification for the maintenance of Coppin Teachers College by the City of Baltimore. Coppin Teachers College has never achieved the strength necessary for accreditation on either a national or regional basis. Inasmuch as this institution is not under state control, action regarding it can be taken only by the Baltimore City School Commissioners. The state has undertaken the responsibility for providing the preparation of teachers for the elementary schools, and it maintains four state teachers colleges for that purpose. Baltimore City at one time provided for the preparation of elementary teachers for both its white and Negro schools, but at present it maintains only the Coppin Teachers College for Negroes. All over the United States the number of teachers colleges maintained by city school systems has decreased greatly during the past twenty-five years. There is no logical reason for the continuance of Coppin Teachers College, and the maintenance of this institution is financially unsound, at least from the point of view of the Baltimore City school system.

The students now served at Coppin Teachers College could be accommodated readily at Bowie State Teachers College or at Morgan State College. The latter institution would be the preferable location for the preparation of Negro teachers for the Baltimore schools because of its accessibility. If the Coppin Teachers College program is transferred, either to Bowie State Teachers College or to Morgan State College, some additional resources would be necessary at the institution to which the transfer is made in order to provide instructional staff and physical facilities, but the amount would not be as large as would be required for an effective program in a separate institution at Coppin Teachers College.

Princes Anne College as the land-grant college for Negroes in Maryland is unfortunately located. It is in the southern part of the Eastern Shore, where it is not only far distant from the bulk of the Negro population, chiefly centered in the Baltimore-Washington area, but where it is also difficult of access from other sections of the state. Princess Anne Col-

lege has no recognition by either national or regional accrediting agencies. Its enrollment is, and always has been, very small, and the cost per student is excessively high even though the quality of the program is low. From the circumstances of the location of Princess Anne College, it seems clear that it can never hope to attract a student body large enough for efficient operation as a land-grant college. It will be difficult, furthermore, in such a location to attract and retain a high-grade teaching staff.

There would be great advantage in moving the land-grant college program to a location more central to the Negro population of the state. Morgan State College has such a location, and consideration might well be given to the development of Morgan State College as the land-grant institution for Negroes in Maryland. Morgan State College already has developed relatively strong departments in science and other fields which are necessary for the support of an effective program in technical subjects such as agriculture, home economics, engineering, and industrial arts. The program at Morgan State College is regionally accredited, a testimony to the general strength of the institution. The transfer of the land-grant program to Morgan State College would necessitate extensive developments in the physical facilities of that institution. The extent of such developments, however, other than the requirement for farm land, probably would be less than would be required for the satisfactory development of the institution at Princess Anne.

Whether the land-grant college program is transferred to Morgan State College or is left for development at Princess Anne, consideration should be given to the question of the location of its control. Princess Anne College is now a branch of the University of Maryland. Under this arrangement the development of the Negro land-grant college has been shamefully neglected. Without question it is the weakest land-grant college anywhere in the United States. The experience with the present arrangement leads to the conclusion that the control of a Negro land-grant college by a Board of Regents whose main interest is in a state university for white

students is not likely to result in satisfactory facilities for Negro students. Only when the institution is under the control of a board and executive staff who are vitally interested in the development of a strong college program can the land-grant institution for Negroes prosper and fulfill its mission—the higher education of the Negro population of the state.

The State Teachers College at Bowie recruits its students almost exclusively from the counties of Maryland. The program at Bowie has not received accreditation by any national or regional agency. The number of students served at Bowie State Teachers College is relatively small and the cost per student is inordinately high. The location practically precludes attendance by any except students who live in the dormitories. A prospective student must either be able to pay the cost of board and room or be subsidized for a part of these expenses through state appropriations. The Bowie State Teachers College is not an economical unit for the state to maintain.

One solution would be to add the teachers college program to Morgan State College. That institution already has a well-organized department for the preparation of secondary school teachers. An examination of the records of graduates from Morgan State College shows that large numbers of them are elementary school teachers. Every student now attending at Bowie State Teachers College could be equally well served at Morgan State College if an elementary teachers curriculum were established there and if suitable housing were provided. If the institution at Bowie State Teachers College were abandoned and its program transferred to Morgan State College, the latter institution would need certain additions to its faculty and its physical facilities, but the amounts would be considerably less than those which would be required to maintain the Bowie State Teachers College and bring it up to a level worthy of accreditation.

Another alternative would be to move the state teachers college program for Negroes to the plant at Princess Anne if the latter is abandoned as a land-grant college. The students now attending the Bowie State Teachers College could

be accommodated just as well at Princess Anne inasmuch as they are all boarding students. The plant developments needed to convert Princess Anne College into a state teachers college would probably be less than those required to provide adequately for the needs of a land-grant college.

The foregoing considerations indicate that it should be possible for Maryland to concentrate its facilities for the higher education of its Negroes into one or at most two institutions, with considerable gain in efficiency and with no loss in educational opportunity to Negro young people. One solution would be to consolidate all higher education for Negroes at Morgan State College and to abandon Coppin Teachers College, Princess Anne College, and Bowie State Teachers College. Another solution would be to maintain both Morgan State College and a state teachers college at the Princess Anne location. The third solution would be to maintain both Morgan State College and Bowie State Teachers College and to abandon the other two institutions for Negro students. These three suggestions are listed in descending order of the gains in efficiency to the state program of higher education. The first would undoubtedly produce the largest possible educational results for the money the state can invest in Negro higher education.

The reorganizations of institutions for Negro students that have been discussed in the preceding paragraphs make no attempt to solve the problems of facilities for graduate and professional instruction so that opportunities for Negroes will be equivalent to those of white students. The achievement of substantial equality for the two races is a legally inescapable necessity. The present plan of providing out-of-state scholarships does not meet the requirements that have been laid down by the courts. Two possible solutions to this problem may be briefly reviewed.

The most economical method of providing instruction in courses where the number of Negroes to be served is small would be to open up such facilities to Negroes in the University of Maryland. This has already been done in the Law School of the University. It is understood, furthermore, that

Johns Hopkins University is willing to admit Negro students to its graduate courses; it has had no qualified applicants because its graduate program is limited to those desiring the doctor's degree while Negroes in general want to take a master's degree. The precedents that have already been set in the state suggest the possibility of providing specialized instruction for Negroes, where the groups to be served are small, at the University of Maryland. Whether this is in accord with social policies of the state is naturally for the state authorities to decide. Further, if there is any substantial number of Negroes needing any professional or graduate curriculum, it should be developed and maintained at Morgan State College.

The only remaining alternative is to build at one of the Negro college centers a complete program of graduate and professional instruction practically as extensive as that of the University of Maryland. Morgan State College is the only institution which shows any possibility of any such development, and the creation of the necessary facilities for a complete offering of professional and graduate work would require many millions of capital outlay and annual maintenance budgets running well into seven figures. The problem cannot be solved by creating makeshift arrangements involving substandard programs at the Negro institutions. The state can be legally compelled to maintain curriculums for Negroes which are equal in extent and quality to those provided for white students. It would be unfortunate for the state to be compelled by legal means to take steps to provide suitable facilities for Negro students. A statesmanlike approach to this problem would involve rapid progress toward the development of suitable facilities for Negro students without further delay.

GENERAL CONSIDERATIONS IN THE REORGANIZATION OF INSTITUTIONAL UNITS

In a reorganization of institutional units for higher education, especially if some of the present institutions are discontinued, there will be the problem of the uses to which the

present buildings and sites of such institutions may be put. This is a problem that is outside the scope of the present survey. Doubtless the State Planning Commission, with its comprehensive knowledge of the general needs of all the agencies in the state, will be in a position to recommend desirable uses for any buildings or sites that are to be abandoned for purposes of higher education.

In the discontinuance of an institution care should be taken to safeguard the interests of all well-qualified staff members. In practically all cases such staff members could be absorbed by other institutions in the state, so that their tenure and salary status would not be affected adversely by the reorganization.

In an earlier chapter an extensive discussion was presented regarding the needs for physical-plant development at each of the existing institutions. It will be recognized that these needs would be materially modified by decisions with respect to the institutional units that are to be retained as part of the state's program of higher education. Thus, any buildings indicated in the previous chapter as needed at an institution which, according to later decision, is to be discontinued would drop out of the picture. Similarly, such an action as the development of Morgan State College as the land-grant institution for Negroes would entail educational plant developments at that institution not listed in the chapter on physical plant.

The reorganization of the institutional units should take place somewhat gradually over a period of time. Obviously it would be necessary in some instances to carry through certain plant developments at one institution before the program at another institution could be transferred there. The whole scheme of institutional reorganization needs to be worked out in some detail in order that it may proceed in an orderly fashion.

It would be unfortunate if institutional loyalties, or sentiment, or political considerations should be allowed to interfere with the orderly development of the best possible system of institutional units for higher education in Maryland. Any

proposal for reorganization of the existing units may be expected to encounter opposition from certain vested interests, particularly those existing within the immediate locality of the institution. Such pressures must be disregarded if the state is to make the wisest possible use of its resources for the education of its young people.

REGIONAL COOPERATION IN HIGHER EDUCATION

Long-term planning for the development of higher education in a state such as Maryland should take into account the possibilities of regional cooperation among the states. It is not necessary to have every possible professional curriculum maintained in every state, particularly in the smaller states. It should be possible for a state such as Maryland to enter into agreements with certain neighboring states for the maintenance of professional schools that will serve the entire region where a single school could readily produce as many graduates as are required by the entire group of states. Through reciprocal agreements Maryland and its neighboring states might each agree to maintain one of these specialized professional schools while the other states refrain from developing this field of study. The agreement should provide for receiving students from each of the cooperating states on the same basis as the residents of the states. If this principle were established for both white and Negro students, it might do much to simplify the problem of providing equal facilities for the two races.

The survey staff has not made any definite exploration of the possibilities or needs for regional cooperation in higher education in Maryland and nearby states. This is a matter that could well be considered by the educational leaders of the state, as they seek to obtain the largest possible extent of educational service from the resources that are available for the support of higher education.

Part II

RECOMMENDATIONS OF THE MARYLAND
COMMISSION ON HIGHER EDUCATION

IX. INTRODUCTION

The duties of the Commission are plainly stated in the law which is its charter. They are:

(1) To study and investigate the whole field of higher education, in order to determine the higher educational requirements for such future period as said Commission shall deem proper and practicable;

(2) To study and report as to the expenditure of the funds now being appropriated by the State to higher educational institutions in the State, the results being obtained by the expenditure of such funds, to what extent such funds are being used to subsidize non-resident students, and whether the institutions receiving State aid are complying with the terms under which the State appropriations are made;

(3) To formulate a general plan or program to be followed by the State in meeting its obligations in the field of higher education for such future period as said Commission shall determine;

(4) To state what it considers should be the relationship between the several higher educational institutions receiving State funds and the State, and particularly as to the scope and area which each of such institutions shall cover.

This statement of our task seems to us to furnish the outline to be followed in making this report.

X. THE FUTURE NEEDS OF THE STATE OF MARYLAND IN THE FIELD OF HIGHER EDUCATION

In order that our recommendations may be fairly judged, the members of the Commission feel that we should make clear at the outset some of the premises upon which we have proceeded in estimating the future needs of the State of Maryland in the field of higher education.

To begin, we accept as axiomatic that higher education in a democratic society should be available on an equal basis to all those who have the ability and the desire to benefit by it. We agree with Dr. James B. Conant, the president of Harvard University, that "it is a principle of this republic that inheritance shall not determine the opportunity for education nor its scope." Inability to pay their way should not prevent our boys and girls from receiving the education needed to equip them for the walk of life for which they are best fitted.

This simple principle has long been accepted in its application to public education at the elementary and secondary school level, but we have been slow in recognizing its relevance to the field of so-called higher education. It is only recently that there has been brought home to us the fact that many students require longer periods of training to prepare themselves for the place which they should fill in the complex industrial society in which we now live. We are coming to realize that the claim of the student with special qualifications for a career as an electrical engineer, for example, is on a parity with the claim of the student who expects to spend his life as a mechanic at a bench. Each should have the opportunity to get the training necessary to do the job for which he is best fitted.

Turning from general principles to a more concrete question, your Commission believes that more of the young men and women of Maryland should continue their education beyond the secondary school level. We have been profoundly impressed with the fact that Maryland stands forty-fifth among the states in the percentage of its youth between the ages of eighteen and twenty who are still in school. Con-

sidered in the light of the growing industrialization of our economy, this seems to us to be ominous. We like to think that our state possesses in a high degree the characteristics of a civilized community, but we cannot fail to realize that these cannot long be maintained if the general level of education of the population is allowed to fall so low that we are not prepared to cope with the social pressures that industrialization inevitably brings in its train.

This does not mean that the Commission accepts the view that every boy and girl should go to college. Doubtless there are many whose time can be otherwise employed with greater benefit to themselves and society as a whole. However, unless there is something radically wrong with the type of post high school education which this community affords, it seems evident to us that we should all benefit if more of our youth were to continue their education for longer periods.

A further premise which we have adopted in reaching our conclusions is that many of our young men and women will find their places in walks of life which do not require the type of education now available in the institutions of higher education which are found within the borders of this state. This may explain, and to some extent justify, the relatively low percentage of those who pursue their education beyond the high school level. In calculating the needs for higher education, we feel that the requirements of this large segment of our youth should be taken into account and that we should include those who need no more than two years' training beyond high school to prepare them adequately for the responsibilities which they will be called upon to meet.

A final assumption is that the needs of the state in the field of higher education can properly be measured by the demand of its qualified citizens for that kind of training. The fact that the state would probably not lack for lawyers if every law school in the state were to close its doors tomorrow does not seem to your Commission to mean that there is no need for facilities for the training of lawyers. If there is overproduction in any given field, it may be assumed that

the demand for that kind of training will diminish. It is from this point of view that we have examined the estimates found in the survey report of the numbers of doctors, lawyers, engineers, and other professional people which the state is likely to need.

In the light of these basic premises, your Commission has examined the data which have been collected in the report of the survey staff. These data are too voluminous to be even summarized here; to appreciate their significance, a reading of chapter i of the report of the survey staff is necessary. It has led us inescapably to the conclusion that in order to meet the future requirements of the state in the field of higher education, three fundamental needs must be met:

First, the state should offer the students who graduate from its secondary schools a greater variety of courses than those which are now available in its institutions of higher education.

Second, the state should make available in widely distributed units two years of post secondary school training in a variety of subjects ranging from general education to strictly vocational studies.

Third, the state should be prepared to afford these opportunities to a much larger number of students than in the pre-war years.

In reaching these conclusions, your Commission has taken into account the extraordinary conditions now prevailing as a result of the war and the passage by Congress of the GI Bill of Rights. We have proceeded on the assumption that this is a temporary condition which will be taken care of within the next few years. We recognize the possibility that a national universal training program such as has been proposed may lead to some form of extension of those legislative provisions which have produced such a tremendous flood of applicants at the door of every institution of higher education in this state, but in reaching our conclusions we have not been influenced by this possibility.

XI. THE EXPENDITURE OF THE FUNDS NOW BEING APPROPRIATED

Your Commission believes that funds now being appropriated by the state to higher educational institutions are, on the whole, being well spent. However, the fact that there are exceptions to the general rule is apparent from the report of our survey staff. In view of the conclusions already stated as to the extent of the future needs in higher education, we think that it should be evident that every dollar devoted to this purpose must be spent as efficiently as possible. We are too far behind the procession to allow ourselves to be influenced by sentiment or by local considerations.

Your Commission has, therefore, undertaken to examine our educational institutions with a critical eye to see whether the money which the state is appropriating for the purposes of higher education is being spent to the best advantage. We have not been so much concerned with the merits or demerits of the administration of any particular institution (although the report of our survey staff contains much useful information on this point) as with the nature of the agencies through which the state is seeking to meet its educational needs. We have tried to ask the fundamental question whether those agencies are the best which the state can develop in order to give its citizens an opportunity to receive the training which will best fit them for the position in society which they can most usefully fill. In short, we have looked for faults of organization in the confidence that if these are corrected the people of this state can be counted on to insist on sound administration.

We think that we have found some faults of organization; indeed, it would be astonishing if we had not done so. In view of the lack of any state agency charged with responsibility for the development of an integrated plan of higher education for the state as a whole and of the consequent almost haphazard development of our system, it is remarkable that we have not found more to criticize. This state is fortunate, for example, in the very few cases of duplication

of work by its institutions of higher education. It is also very fortunate in the possession of some excellent privately owned and operated institutions of higher education which are caring for the educational needs of many of our citizens in a way which could hardly be improved upon. The mere presence in the community of such institutions as The Johns Hopkins University and Goucher College, to name some of those which have a national reputation, raises the general standard of well-being of our people. In the field of medicine alone, the influence of the Johns Hopkins Medical School and of the Johns Hopkins Hospital in elevating the standard of medical care available to citizens of this state can hardly be overestimated. It is felt in every hospital and in every clinic in the state.

These facts may explain to some extent the continuance in this state of the policy (long since abandoned elsewhere) of state aid to privately controlled institutions. Perhaps the people of Maryland have thought of higher education as a job for private institutions with the state filling in the gaps. Your Commission believes that the facts developed in chapter i of the report of our survey staff should finally dispose of this idea. As we have already stated, the education of youth seems to us to be a burden which is bound to grow ever heavier as our civilization increases in complexity. That burden does not stop at the high school level; it does not stop until all our boys and girls have received the training they need to take the places in society to which their capacity and industry justify them to aspire. The task is undoubtedly lightened by the activities of private institutions. However, a realistic appraisal of the contribution which they can make without sacrifice of their essential characteristics seems to us to make it very clear that the major burden of affording post high school training must be borne from now on by state-controlled institutions, and for this purpose a well-integrated system is needed. (See especially chapter ii of the survey report.)

With this in mind, we turn to a brief examination of the system as it now exists in this state as it is described in chapter ii of the report of our survey staff. In commenting

on the agencies for post high school training now available, we shall try to give categorical answers to the special questions referred to in the law creating this Commission.

THE UNIVERSITY OF MARYLAND

At College Park the University of Maryland has a large physical plant where nearly eight thousand young men and women are now receiving post high school training. The courses offered are wide in scope covering generally the liberal arts, the basic sciences, engineering, business and public administration, home economics, agriculture, and teacher training. In addition to the College Park schools, the University of Maryland offers professional training at its Baltimore schools in law, medicine, dentistry, pharmacy, and nursing. Finally, the University of Maryland is attempting to conduct at Princess Anne College in Worcester County a school of agriculture and mechanic arts for Negroes.

Prior to 1920 the position of the University of Maryland in the educational pattern of our state was useful but inconspicuous. Today it holds the limelight to such a degree that the glare tends to make us unable to see how great has been the accomplishment. Your Commission ventures to believe that many people will learn with some surprise that the College Park schools of the University of Maryland, measured by the standards customarily applied in surveys of this character, rank well above the average of similar institutions elsewhere. The facts set forth in chapter v of the report of our survey staff seem to make it clear that we have in the University of Maryland an institution which can hold up its head among state universities of greater age and larger financial resources. This is an accomplishment in which the state can take legitimate pride.

In the professional schools a somewhat different situation exists. Over a long period of years they have acquired a reputation for good work, which it is the habit of the people of the state to take more or less for granted. As far as your Commission has been able to observe, the schools of law, pharmacy, and dentistry fully deserve their good reputation. However, chapter v of the report of our survey

staff shows that the schools of medicine and of nursing face a near crisis, and unless prompt action is taken to increase their resources, their usefulness to the state seems certain to be greatly impaired.

Princess Anne College is far below standard, as the report of our survey staff clearly shows. This is frankly admitted by the President of the University, who attributes this condition directly to the lack of adequate state support for the school.

Our survey staff has noted certain weaknesses of organization in the University of Maryland which we believe should have the attention of the Board of Regents. We place special emphasis on an apparent overcentralization of administration which tends to deprive the members of the faculty and staff of a sense of security and to make them feel that they are not participating in the formulation of the program which they are to execute. We have been informed that this condition has been responsible for the failure of the University to obtain the services of some valuable men. In this connection, we have been advised that legal doubts have arisen as to the authority of the Board of Regents of the University of Maryland to control the appointment and removal of members of the staff and of the faculty of the various components of the University. We strongly recommend the prompt passage of legislation which will set these doubts at rest and which will make it perfectly clear that the president of the University acts at all times under the direction and control of the Board of Regents. The present concentration of authority in the president has, in our judgment, had a definitely harmful effect on morale, and is, in part at least, responsible for some of the incidents which have recently tended to disturb public confidence in the institution.

A further word should be said on a subject upon which we are particularly required to comment, namely, the extent to which funds now being appropriated to the University of Maryland are being used to subsidize nonresident students. To begin with, it should be borne in mind that educa-

tion beyond high school cannot be fully paid for by tuition fees. Unless we want to shut the doors of the University of Maryland to students from other states, we cannot afford to make them pay the full cost of their education. The admission of any out-of-state students, therefore, necessarily involves some degree of subsidy from state funds. Your Commission believes that no institution of higher education should entirely close its doors to students from other states; to do so would, it seems to us, lead to provincialism and complacency which, to express it mildly, are serious faults in any educational institution. On the other hand, the facts shown in the report of our survey staff seem to us to demonstrate that the enrollment of nonresident students from the District of Columbia, particularly in the College of Engineering, is excessive and imposes an unreasonable burden on the taxpayers of this state. In this connection it is noteworthy that students from the District of Columbia, although required to pay more tuition than Maryland students, are paying less tuition than students from other states. We can see no justification for continuance of this preference, if indeed it was ever justified, and we strongly recommend that steps be taken to abolish it, by legislation if necessary.

In addition to abolishing the preferential treatment now being given to residents of the District of Columbia, your Commission recommends the adoption by the state of the policy now followed by the State of Wisconsin. Any out-of-state student seeking entrance to the University of Wisconsin must pay the same tuition that the state university in his home state would require a student from Wisconsin to pay. This policy of reciprocity seems to us to have much to commend it.

Finally, we are enjoined to comment on the extent to which the University is complying with the conditions under which state funds have been appropriated to it. This involves consideration of the very extensive controls which the state now maintains over the operations of the University. These are dealt with hereafter. At this point it is enough to say that the report of our survey staff has pre-

sented no evidence of any failure on the part of the University to comply with the terms under which appropriations have been made to it.

MORGAN STATE COLLEGE

With the exception of the courses offered at Princess Anne College and at the School of Law in Baltimore, Negroes do not at present attend the University of Maryland. In order to meet its constitutional obligations to afford equal educational opportunities to all of its citizens, the state is now operating Morgan State College. At that institution courses in the liberal arts and in the basic sciences, as well as courses in teacher training, are available to Negro students. However, Morgan State College in no sense parallels the activities of the University of Maryland. Thus, courses in agriculture and engineering are not offered, nor are any opportunities for professional study or graduate work available. In recognition of this fact, the state has awarded scholarships to Negroes so that they may pursue, at institutions beyond the borders of the state, courses not available to them in any state-controlled institution.

The report of our survey staff makes it clear that the money appropriated to Morgan State College is well spent and that the results being achieved are commendable. There does not appear to be any excessive subsidization of non-resident students, although the percentage of nonresident students is fairly high due in part to the fact that rather high tuition fees limit the number of residents who can afford to attend this institution. We have found no evidence of failure on the part of Morgan State College to comply with the conditions upon which appropriations have been made.

STATE TEACHERS COLLEGES

In addition to affording opportunity for graduate study in education and for the training of teachers at the University of Maryland and at Morgan State College, the state maintains four separate schools for the training of teachers in elementary schools. Those located at Frostburg, Towson, and Salisbury are for white students; that at Bowie for

Negroes. The schools at Frostburg, Salisbury, and Bowie also operate junior college curriculums.

Our survey staff has made a careful study of the operation of these schools, but conditions are now so abnormal that it is difficult to reach any positive conclusions about the efficiency of their operation. It would be easy to say that the schools are operating at a high cost and that the number of teachers who are being developed is relatively small. However, the lack of economic incentive to enter the teaching profession seems to be primarily responsible for this condition.

We have been particularly impressed with the report on the activities at Frostburg. The number of teachers being trained at that institution is certainly very small in relation to the amount of money which the state is investing. This is in part due to the unfortunate location of the physical plant, which is extensively commented on in the report of our survey staff.

A further word should be said on the special subject of training Negro teachers. Teachers in the Negro elementary schools of Baltimore City are not offered training in any state institution, nor does the state afford, except through its scholarship program, any opportunity for Negroes to do graduate work in the field of education. However, the work being done at Bowie in training teachers for the elementary Negro schools of the state other than those in Baltimore City seems to be on a parity with that being done in the other state teachers colleges. Moreover, Baltimore City is conducting at municipal expense Coppin Teachers College for the training of Negro elementary school teachers. Strictly speaking, this institution is no part of the state system of higher education.

ST. MARY'S FEMALE SEMINARY

The state is conducting a junior college for women at St. Mary's City. The findings of our survey staff show very clearly that this operation is without economic justification due to the small size of the institution and to its inaccessible location.

PRIVATE INSTITUTIONS RECEIVING
STATE AID

Johns Hopkins University

Since 1912 the state has been contributing to the support of the School of Engineering of The Johns Hopkins University. Except for an original gift of \$600,000 for the erection of a building, the contribution has been principally in the form of scholarships. We shall hereafter comment at length on this question and on the principle involved. While your Commission has been unable to obtain from the authorities of The Johns Hopkins University financial information comparable to that made available by every other institution receiving appropriations of state funds (with the single exception of Princess Anne College), we have no reason to doubt that the funds appropriated to the Johns Hopkins School of Engineering have been well spent, that the results obtained have been excellent, that no substantial subsidy to nonresident students has been involved, and that there has been substantial compliance with the terms under which state appropriations have been made.

Western Maryland College

The state has supported through scholarships a program for training secondary school teachers at Western Maryland College. Our findings in reference to the School of Engineering of Johns Hopkins University are equally applicable here.

Washington College

This institution has received generous state support in the form of scholarships. In recognition of the fact that it is essentially a state-supported institution, one-half of the members of the governing board of the College are appointed by the governor of the state. Our survey staff has found little fault with the manner in which the appropriated funds have been spent. Washington College affords residents of the Eastern Shore, who, for economic reasons, find it impossible to attend the University of Maryland, an opportunity to

obtain an education in the liberal arts; at the same time, it furnishes a center of culture in a community which differs sharply from the rest of the state in many ways. As this institution because of its present crowded condition virtually excludes students who are not residents of the state, no question of subsidy to nonresidents is involved. However, there does seem to have been a failure on the part of this institution to comply with the conditions laid down by the legislature in appropriating funds to its support in that no effort appears to have been made to require female scholarship-holders to teach in the public schools.

St. John's College

At St. John's College the state has been subsidizing a highly specialized course in general education from which few Maryland students benefit; in fact, our survey staff reports that no more than twenty-one Maryland students who pay their own tuition are now enrolled at St. John's College. Your Commission does not desire to enter the controversy which has so long raged in educational circles as to the value of the St. John's program. We note with interest the findings of our survey staff indicating that by the tests commonly used in measuring the performance of institutions of this character, St. John's ranks low. Frankly, we feel that these findings must be considered in the light of the fact (to which our survey staff also calls attention) that the usual criteria are not applicable to the St. John's program because it is based on radically different assumptions from those accepted in preparing these criteria. We can safely say, however, that in relation to the money spent, the number of Maryland citizens who are benefited is very low indeed. We can also say that a substantial subsidy to nonresident students appears to be involved in this appropriation. Finally, we think that the findings of our survey staff make it clear that St. John's has not complied with the terms under which state appropriations have been made to it, in that the courses offered do not qualify scholarship students to teach the required period in the Maryland schools.

XII. A PLAN FOR THE FUTURE

If the slate could be wiped clean and a brand new system of institutions created for the post high school training of the youth of Maryland, your Commission would find it relatively easy to formulate a general plan or program to be followed by the state in meeting its obligations in the field of higher education for the future. Our task is not so simple. The fact, for example, that the College Park schools of the University of Maryland are located in the metropolitan area of Washington, rather than in the center of population of the state, is doubtless unfortunate, but it seems obvious to us that any plan which fails to take this fact into account would be worthless. Accordingly, we have tried to face realities and to frame our recommendations in such a way as to avoid the destruction of agencies which are of proved value. At the same time, we have not hesitated to recommend changes where it seemed clear to us that the future needs of the state could not be met without them or that the taxpayers' money was being wasted. In this connection we have been unable to ignore the fact stressed in chapter viii of the report of our survey staff that Maryland is supporting more different institutions of higher education than any comparable state in the union.

We have previously indicated, in broad outline, what, in our opinion, are the future needs of the state in the field of higher education. To meet those needs we propose the following program:

1. The establishment of a state-wide system of locally controlled junior college units where both white and Negro students will be offered two years of post secondary school training in a variety of subjects ranging from the liberal arts to strictly occupational studies.

2. The ultimate expansion of the University of Maryland to a capacity of 10,000 students with a curriculum offering both graduate and undergraduate instruction in the liberal arts, the basic sciences, agriculture, business administration, engineering, and teaching as well as the principal professions.

3. The development of Morgan State College into an institution where Negroes can obtain both graduate and undergraduate instruction in the liberal arts, the basic sciences, agriculture, engineering, and teaching.

4. The establishment at the University of Maryland and Morgan State College, of separate courses for the training of teachers in the elementary schools.

5. The maintenance of Washington College as a liberal arts college under state control.

6. The repeal of existing scholarship legislation and the development of a system for awarding scholarships designed primarily to help outstanding students get the education for which they are qualified.

7. The maintenance as a state agency of the School of Engineering at Johns Hopkins University.

8. The abandonment of Frostburg State Teachers College, Coppin Teachers College, Princess Anne College, and St. Mary's Female Seminary.

9. The establishment of an adequate salary scale for members of the faculty of the various state-controlled institutions.

10. The erection of such new buildings and improvements as may be necessary to accomplish this program.

Your Commission proposes this program as a relatively long-range project to be completed over a period of years. We believe, however, that no time should be lost in working out the details so that a beginning may be made as promptly as possible. The report of our survey staff contains much information which should prove helpful in this connection.

1. A SYSTEM OF JUNIOR COLLEGES

Your Commission strongly recommends the establishment, at the earliest feasible moment, of junior college units in association or integration with selected high schools located in Baltimore City and in the counties. Although the report of our survey staff contains much helpful information on the point, we have thought it wiser to leave for further

study the choice of the schools to be selected for the establishment of such units. Your Commission wishes to emphasize, however, that we are in complete agreement with the report of our survey staff on the paramount importance of maintaining the principle of localism in so far as it is possible to accomplish this. The data set forth in chapter vii of the survey report have convinced us that a large number of qualified students are in effect denied the opportunity to continue their training beyond high school because no courses are accessible to them within reach of their homes. This, we think, is the primary reason why the establishment of a soundly conceived junior college program is desirable.

We further agree with the findings of our survey staff that these units should be made available to all qualified applicants by the elimination of tuitions and by the establishment of a program of subsistence scholarships for those who cannot afford to live away from home while attending. This is particularly needed in connection with the operation of junior college units for Negro students since, for reasons clearly shown in the report of our survey staff, adherence to the principle of localism is especially difficult in this case.

In order to encourage such a program, we think that the junior college units should share in basic state aid just as do the lower schools. We also think that they should participate in equalization funds by being made a part of the state minimum-school program. We recognize that the financing of such a program will impose a substantial burden on the taxpayers and that it is much easier to propose additional expenditures than to find the funds with which to meet them. However, the development of a junior college program along the lines recommended by our survey staff is, in our opinion, of great importance to the future well-being of this community, and if the state's ultimate annual share of the expense of the program does not exceed the estimate of \$350,000 made by our survey staff, it would seem to be not too onerous a burden. This estimate assumes that Baltimore City and each of the counties will make a contribution ranging from an estimated \$252,000 in the case of Baltimore

City to \$7,800 in the case of Queen Anne's County. (See Table 57 in chapter vii of the survey report.) In this connection it should be noted that the establishment of junior colleges will permit the abandonment of junior college curriculums now being maintained at state expense at Bowie, Frostburg, and Salisbury.

Your Commission has given careful consideration to the strong recommendation of its survey staff that the curriculum of the junior colleges be sufficiently broad to include both preparatory and terminal courses. There is another view, however, that junior colleges should concentrate on terminal education with special emphasis on vocational studies. While we are impressed with the arguments presented in chapter vii of the survey report, we do not find it necessary at this time to choose between these competing views. The development of a sound junior college program will necessarily take time, and there will be opportunity for further exploration of this question in the light of future developments.

2. THE UNIVERSITY OF MARYLAND

It is with great reluctance that your Commission has reached the conclusion that further expansion of the University of Maryland will be necessary in the future. Aside from the increased burden on the taxpayers, which we deplore, the further growth of the University carries with it dangers which cannot be lightly dismissed. A passage in the annual report of the President of Johns Hopkins University delivered in November 1945 seems to us to put the matter very clearly:

Few are the schools that are both big and good. There is no substitute for a personal relation between teacher and student. Each must be an individual to the other. The fatal flaw in mass education is that entertainment is inseparable from a large lecture course. A student who desires merely to receive pleasurable impressions in the class room is wasting his time in a university. It is the student's effort, initiative, and talents that are to be called into play. This is a high ideal and the road to it

is difficult because personal instruction is costly. The temptation is to instruct in large groups because it is cheaper, and all universities are needy all the time. . . . When a university succumbs to juvenile standards of entertainment and popularity the taxpayer is being cheated. When it relinquishes or fails to acquire creative intellectual power the public loses the benefit of modern knowledge—in its industries no less than in its secondary schools and in its cultural life.

Further increases in college enrollments may be expected in a year or two. The challenge to high intellectual standards will be renewed and intensified. In the name of "service," expansionist policies are more likely to win popular approval. The hard way, which leads to the truly prepared mind, will not be popular. The high standards of training of the football squad are not tolerated in the classrooms of far too many institutions.

We also think it important that the state should not duplicate the activities of private universities and colleges, but the chief asset of the private institution is its freedom to choose its own students and to limit the numbers of those students accordingly. The findings set forth in chapter ii of the survey report have convinced us that the private institutions of this state will not carry the load of educating the additional students who will have to be taken care of in future. Unless, therefore, we are to abandon the fundamental principles which we have tried to state at the outset of this report, your Commission believes that an increase in the size of the University of Maryland cannot be avoided.

In arriving at the figure of 10,000 as the future capacity of the University, we have been guided by the advice of our survey staff that experience has shown this to be the maximum number which can be handled in one institution without loss of efficiency. We agree with the prediction of our survey staff that the time is not far distant when enrollment at the University will reach this maximum figure. We have not overlooked the fact that a system of junior colleges, such as we have recommended, may reasonably be expected to absorb a number of students who would otherwise enroll elsewhere but according to our survey staff, expe-

rience elsewhere has shown that any such gain will be largely offset by the extent to which the junior colleges act as feeders for those institutions which offer more extended courses. While we doubt that the development of junior colleges will go far to reduce enrollment at the University of Maryland, we believe that it should permit the ultimate abandonment of some of the courses in which instruction is now offered.

Aside from the possible future effect of the junior college program, your Commission has given careful thought to the necessity for a continuance of everything that is now being done by the University of Maryland. We have, it is true, not felt it necessary to study those activities which are performed by the University primarily in its capacity as the State Board of Agriculture. Such activities as the new laboratory at Crisfield, for example, seem to us to be beyond the scope of our inquiry. In all other respects, however, we have attempted to satisfy ourselves that the program of the University is within the limits marked out by the needs of the state.

Apart from the Princess Anne project, the activities of the University of Maryland which have had our special attention are those conducted at the schools of medicine and nursing in Baltimore and at the College of Engineering at College Park.

A. The School of Medicine

The story of the Medical School may be briefly told. It has a long and honorable history of usefulness to the state. From its doors have come a high percentage of the physicians and surgeons who have practiced in this community. Withal, it has been operated with only a minimum of state support. The time has now come when a change is imperative. It is no longer possible to maintain a good medical school on tuition fees nor can adequate teaching facilities be afforded by a hospital which must look to revenues from private patients for its principal support. Furthermore, the exigencies

of a modern medical school seem to demand the appointment of full-time men to head the various clinical departments as well as to other key positions. Part-time men simply cannot find the time to teach, to perform a myriad of administrative duties, and to conduct enough investigatory work to keep themselves in touch with the swiftly moving current of medical knowledge. At least that is the view presented to us by our survey staff which we accept for the purposes of this report.

The necessary changes can be postponed no longer. Already the Medical School faces a near crisis. Unless steps are taken promptly, it will be impossible to hold on the faculty and staff those young men who are the backbone of any good medical school. The time is not far off when the University of Maryland Medical School will lose its accredited status and no longer be worthy of support by the state.

The question immediately arises where the money is coming from to carry out the necessary changes. That they will be expensive cannot be doubted. The budget request already made for the next biennium is merely a foretaste of what is to come. Your Commission has had the opportunity to examine a plan of future development prepared by the faculty of the Medical School under the supervision of the Dean. To carry out that plan in every detail would cost more than \$400,000 annually over and above current appropriations.

It is vain to hope for additional revenues from tuitions. The report of our survey staff shows that students at the University of Maryland School of Medicine are already paying as much as, if not more than, those at private medical schools of equal or greater reputation. If the Medical School is to look to the state for its principal support in future, its tuitions must be lowered, not raised. It will be hard to defend a condition under which students are obliged to pay more for admission to a state-operated institution than for admission to a private school where they can obtain an equally good education.

There seem to be only two courses which your Commission could recommend in view of these facts. The first is to abandon the School of Medicine altogether. The second is to increase appropriations sufficient to maintain it adequately. In choosing between these recommendations, we have asked our survey staff to analyze the needs of the state for medical service as well as the opportunities which might be available to its citizens to obtain medical education elsewhere. They have not, of course, overlooked the presence of the Johns Hopkins School of Medicine with its international reputation for excellence. They are satisfied, however, that that institution cannot be expected to train all those Maryland boys whose future work in life should be the practice of medicine, nor can it supply the state with all the practitioners who will be needed to give its citizens adequate medical care. In view of present conditions, they likewise doubt whether out-of-state institutions of equal reputation can be expected to take on the load which the University of Maryland Medical School now carries.

Accordingly, we feel obliged to recommend increased state support for the University of Maryland Medical School. The exact extent of such support should not be determined, it seems to us, until after a thoroughgoing survey has been made of the School of Medicine and the University Hospital and of their relation to a long-range plan for the future development of medical care for the people of this state. Had your Commission been qualified for this task, it would have lacked the time to perform it. It appears to us, however, to be an urgent need, and we, therefore, strongly recommend that a group of qualified experts be selected to conduct such a survey and to prepare a program for the further development of those institutions and their integration in a system of medical care designed to meet the future needs of the state as a whole. We are satisfied that such a group will obtain invaluable assistance from the plan to which reference has already been made as well as from the studies which have been made by the Committee on Medical Care of the State Planning Commission.

B. The School of Nursing

The School of Nursing stands alone among the professional schools maintained by the University of Maryland in lacking complete accreditation. No one familiar with the desperate need for nursing services that exists today can doubt the advisability of maintaining the School of Nursing of the University of Maryland. If it is to be maintained, we think that it should be maintained on an adequate basis and that the necessary steps should be accomplished to permit the school to obtain a fully accredited status.

C. The College of Engineering

The problem of the College of Engineering of the University of Maryland is principally one of geography. We have already noted that the location of the College Park schools is, in many respects, an unhappy one. This is especially true in its relation to those students who need engineering training, by far the greater percentage of whom are located in the metropolitan area of Baltimore. The report of our survey staff leads us to emphasize the significance of accessibility in estimating the value of an institution as an educational agency. It seems to be established by indisputable evidence that the percentage of students who attend school or college away from their homes is not large. It should be borne in mind also that students who are looking for engineering training often come from the lower economic levels, where the difficulties of commuting or of living away from home are especially great.

The facts developed by our survey staff show that these are not merely theoretical fears. They show that less than 40 percent of the present enrollment at the College of Engineering at College Park come from the metropolitan area of Baltimore. By contrast, more than 40 percent come from the metropolitan area of Washington.

There are several things that might be done about this. Our recommendation for the establishment of a system of junior colleges, if carried out, would result in improvement. Your Commission has considered yet a further possibility,

namely, the transfer of the College of Engineering to Baltimore City. In this connection we have also given thought to its possible consolidation with the School of Engineering of the Johns Hopkins University which is also supported by the state. There are obvious objections to any such course. The physical facilities now available at College Park and those which will be available in the near future as the result of the gift of The Glenn L. Martin Company present an imposing obstacle. The desirability of integrating a course in engineering with instruction in the basic sciences presents another. Obtaining the consent of the Board of Trustees of the Johns Hopkins University to any form of consolidation under state supervision may well prove impossible. For the reasons just stated, we do not feel able to recommend the discontinuance of the College of Engineering at College Park.

3. MORGAN STATE COLLEGE

We turn now to the thorny problem created by the long-standing practice, deeply woven into the social fabric of this state, of separation of the races. Your Commission has tried to face this problem honestly and to meet squarely the issues which it presents. We are fully aware of the constitutional obligation upon the state to afford equal educational facilities to Negroes and whites alike—an obligation which seems to us to be inherent in a democracy. We are equally aware of the difficulties which lie in the way of complete fulfillment of this obligation so long as the principle of maintaining separate schools is carried through graduate and professional instruction. While we recommend no change in the practices now being followed in this respect, we are convinced that their successful continuance depends upon the willingness and ability of the state to improve the facilities which it now offers for the higher education of Negroes.

At present the state is scattering its shots badly. Princess Anne College and Morgan State College are each performing some part of the functions which the University of Maryland performs for white students. The gaps are being filled

in by a scholarship program administered by Morgan State College under which provision is made for attendance at institutions beyond the borders of the state by those Negro students who require training which is not available at any local Negro institution.

It seems to us that there are manifest defects in this system. Our survey staff has strongly recommended the designation of Morgan State College as the land-grant college for Negroes in this state and the abandonment of the operations at Princess Anne. Your Commission concurs in this recommendation. We can see no hope of developing at Princess Anne an institution in any way comparable to the agricultural and mechanical schools at College Park. The obstacles in the way of developing such an institution at Morgan State College seem to us to be far less formidable. We recognize that it may be desirable for the time being to continue certain activities at Princess Anne, and we, therefore, recommend that the physical facilities located there be transferred to the control of Morgan State College.

Your Commission believes that the time has come for Morgan State College to assume the burden of graduate instruction in the field of teacher training. The number of out-of-state scholarships now being awarded for that purpose is quite large, and continued failure to provide opportunities for such training within the borders of the state is difficult to justify.

A further suggestion in a special report made to our survey director that operations at Bowie be transferred to Princess Anne seems to us unwise. We think that a much stronger case could be made for transferring those activities to Morgan State College along with the activities now being conducted at Coppin Teachers College in Baltimore City. This, however, is a question which we will discuss hereafter in connection with future plans for the state teachers colleges as a whole.

In addition to the changes in organization which we have recommended, your Commission feels bound to call attention to the relatively inadequate financial support which

Morgan State College has been receiving from the state. We have been shocked by the comparison presented to us by our survey staff between the expenditure per student at Morgan State College and at every other comparable institution in the state for which figures are available. We think that these figures speak for themselves and call for no elaboration on our part.

It seems to us that the state's obligation to afford equal facilities requires the adoption of a policy of supporting institutions for the higher education of whites and of Negroes at the same financial level. Specifically, we make the following recommendations:

a) That any racial discrimination with respect to the salaries paid to the staff and faculty between institutions for white and Negro students should be eliminated and that the maintenance of nondiscriminatory salaries should have the special attention of the proper authorities of the state.

b) That the state budget provide such annual appropriations for institutions for the higher education of Negroes that the activities being conducted at those institutions may be maintained on a basis equal in quality to those maintained in comparable state institutions for white students.

c) That in order to bring Negro institutions to the level of white institutions, sufficient additional funds be immediately appropriated to Morgan State College and to the State Teachers College at Bowie to enable them to qualify for national accreditation status equivalent to that held by the comparable institutions for white students.

d) That specific provision be made for the land-grant college for Negroes to have an equitable share of the federal funds allocated to the state for agricultural extension and for research in agriculture and the mechanical arts.

4. TEACHER TRAINING

Your Commission is not entirely satisfied that the practice of training elementary school teachers in separate institutions is a sound one. The report of our survey staff sets forth, it seems to us, strong reasons for believing that equally

good results could be obtained at considerably less cost if this function were assigned to the University of Maryland and to Morgan State College and if separate courses for training elementary school teachers were maintained at these institutions. The University of Maryland is already offering courses of this character, and we have previously recommended that Morgan State College offer graduate instruction in the field of education. We think that the addition of separate courses for the training of elementary school teachers at Morgan State College would be a logical development.

We recognize, however, that the present critical shortage of teachers in the elementary schools makes it imperative not to make any move at this time which might reduce the flow of new teachers into the school system of the state. For this reason we do not recommend the discontinuance for the present of the state teachers colleges at Bowie, Towson, or Salisbury. However, we strongly recommend that this question be given further study, in the light of the considerations summarized in chapter viii of the report of our survey staff.

Your Commission does feel obliged to recommend the prompt discontinuance of the State Teachers College at Frostburg. We are convinced that the cost of operating this unit is not justified by the very small number of its graduates who are entering the school system of the state as teachers. In reaching this conclusion, we have been strongly influenced by the report of our survey staff as to the present condition of the physical facilities at Frostburg. It is apparent that the state faces a heavy capital expenditure if operations at that location are to be continued. Frankly, such an outlay seems to us to be an indefensible waste of public money.

We think that the junior college courses now available at Frostburg would be much more useful if given at a junior college located in Cumberland and properly integrated with a local high school. We see no reason why the abandonment of the State Teachers College at Frostburg should result in the loss of any teachers to the state school system. The facilities in Towson are adequate to care for all the students at

Frostburg who are now studying to become teachers. They can easily be expanded to meet future needs, and an adequate program of scholarships could offer sufficient financial inducements to overcome any reluctance which prospective students from western Maryland might otherwise feel to leave the vicinity of their homes.

Another step which we think should now be taken is the abandonment by Baltimore City of Coppin Teachers College and the assumption by the state of the responsibility for training teachers for the Negro elementary schools of Baltimore City. At present this city draws both its elementary and secondary school teachers in the white schools from state-supported institutions but feels obliged to train its own teachers for the Negro elementary schools. Our survey staff reports that the results are not satisfactory and recommends that the task of training Negro elementary school teachers for the Negro schools be assigned to Morgan State College. Your Commission is fully in accord with this recommendation.

5. WASHINGTON COLLEGE

Your Commission is not recommending any radical departure from existing practice in proposing the maintenance, as a state-controlled institution, of a liberal arts college on the Eastern Shore of Maryland. In all but name Washington College is such an institution. One-half of the governing board is now appointed by the governor of the state, and the state bears substantially the entire burden of paying the difference between the cost of operating this institution and the revenues from tuitions. The President of Washington College has frankly stated that every student at the College is to that extent the beneficiary of a state scholarship. It would only be recognizing facts to transfer the facilities of this institution to the state and to provide for the appointment of its entire governing board by the state, with the provision suggested by our survey staff that the governor name a part of the board from candidates suggested by the alumni.

The question remains whether the state is justified in maintaining a separate liberal arts college on the Eastern

Shore. We think that it is. In many respects the Eastern Shore of Maryland is a community separate and apart from the rest of the state. Washington College has been a center of culture for that community for a very long time. We should hesitate long before recommending its abandonment. We have considered the effect on the future usefulness of Washington College of the inauguration of a junior college program such as we have recommended. The immediate effect may well be to reduce the enrollment at Washington College, but in the long run we are inclined to the view that this condition will not be permanent. Here again re-examination of this question at some future date seems desirable.

Your Commission would like to emphasize that it is not recommending that Washington College be incorporated into the University of Maryland. Such a consolidation would, it seems to us, take away the major reason for the continued existence of the institution. It is because Washington College has developed its own unique place in the cultural life of the Eastern Shore that we believe that the state is justified in continuing to support it. Consolidation with the University of Maryland would, we think, inevitably tend to deprive the institution of its special characteristics.

6. A SCHOLARSHIP PROGRAM

Your Commission has included in its program for the future the establishment of a system of scholarships designed primarily to assist qualified students who would otherwise be unable to continue their post high school training. We are convinced that such a program is essential if true equality of opportunity is to be given to the youth of this state. We repeat what we have said before, that we believe that many Maryland boys and girls who are able and willing to continue their education beyond high school are failing to do so for no other reason than their inability to pay the cost—a reason which we believe to be a reproach to this state. Here we would like once again to point out how hard it is for the poorer students to attend schools which require them to live away from home. We do not think that the importance of this can be too strongly emphasized.

Your Commission envisions a system of scholarships flexible enough to take care of a variety of needs. It should make possible the attendance of Negroes at junior college units which are located too far away for them to remain at their homes; it should take care of the students from Garrett County who want to enter the Towson State Teachers College; it should help the boy from Essex or Dundalk who wants to attend the School of Aeronautical Engineering at College Park; it should take care of the girl from Snow Hill who wants to take a course in secondary education at Western Maryland College, and it should make possible attendance at Morgan State College by worthy Negro students who cannot afford to pay the tuition fees. These are but a few illustrations of the many situations which a soundly conceived program of scholarships would have to take into account. Such a system should, we think, be administered by a central agency which would estimate the amount needed and present periodic requests to the governor and to the legislature, just as other items are presented which are to be included in the state budget.

We think that this body should have a wide discretion, within the amount appropriated, to fix the number and amount of scholarships and to attach such conditions as it might find necessary. From time to time the interests of the state might require the encouragement of particular courses of study; a shortage, for example, of teachers or of nurses might be met by the award of scholarships encouraging entrance into those professions. Such scholarships could be limited to institutions within the state which were qualified to give adequate instruction in the particular field.

Ideally, perhaps, all of these scholarships should be allotted without regard to geographical or other considerations. In view, however, of the time-honored method by which scholarships have been awarded in this state, we would suggest that a fixed number (perhaps one-half) of these scholarships be allotted among the districts of Baltimore City and the counties in proportion to their respective population as shown by the most recent census and that these scholarships

be awarded to individuals chosen by the members of the state senate from the particular districts from among candidates selected after competitive examination. It should be noted that these particular scholarships would differ from those now provided by existing legislation only in that they would give the student the choice of the institution to be attended.

In order to accomplish this program, we recommend the repeal of all existing scholarship legislation (except that relating to the out-of-state scholarships awarded by the trustees' committee of Morgan State College to Negro students who want instruction in courses not available at any state-supported institution located within the borders of this state) and the enactment of entirely new legislation. In drafting such legislation we recommend that specific provision be made for a fair and equitable allotment of scholarships to worthy Negro students for study at either Morgan State College or Bowie State Teachers College.

We think it important to emphasize that no genuine system of state scholarships now exists. What we have is a hodge-podge which has grown up over a period of more than a century as a result of a desire to meet a specialized demand here or to assist a particular institution there. We believe that nobody who has taken the trouble to read chapter iv of the report of our survey staff will be able to defend our scholarship system as it now exists.

At this point it may be well to emphasize the distinction between a scholarship program and a program of state aid to privately controlled institutions. It seems to your Commission that a subsidy is one thing and a scholarship another. One should be designed primarily to aid the institution, the other to help the student. Failure to bear this in mind can lead only to a continuance of the present confusion.

Aside from any question of concealed subsidy, no institution which now benefits from existing scholarship legislation should suffer from its repeal. We have not overlooked the consideration stressed by the President of Western Maryland College that existing legislation insures a steady flow

of students to the department of education of that institution. We believe that this objection can be met satisfactorily by a flexible administration of the scholarship program which we have suggested. Aside from special situations of this kind, your Commission has every reason to feel confident that any institution of higher education which is worth its salt will have no need to worry about getting enough students in the foreseeable future. If circumstances should change hereafter, it will, of course, be possible to revise the state's policy.

7. THE JOHNS HOPKINS SCHOOL OF ENGINEERING

We have previously given our reasons for thinking that the state needs a school of engineering located in the metropolitan area of Baltimore. Such a school has been maintained at The Johns Hopkins University since 1912. As has been previously stated, the buildings in which this school is housed were built with state funds, and the state has been making annual contributions roughly equivalent to the difference between the cost of operating the school and the revenues from tuition fees. It appears, therefore, that the School of Engineering at The Johns Hopkins University has been supported by the state, and it would seem not unreasonable to conclude that it should be classified as a state agency. President Bowman has frankly stated that the University so regards it.

Your Commission believes that the need for an engineering school located in Baltimore can best be met by continued support of the School of Engineering at Johns Hopkins University. Accordingly, your Commission recommends that in the event of repeal of the present legislation providing for scholarships, a direct appropriation be substituted in the amount of approximately \$80,000 for the biennium 1947-49. At the same time, your Commission believes that further support of this institution should be conditioned upon the establishment of an arrangement which would insure the same fiscal controls that are applicable to state-controlled institutions. The nature of these controls is discussed at a later point in this report.

8. THE ABANDONMENT OF PRINCESS ANNE COLLEGE, ST. MARY'S
FEMALE SEMINARY, COPPIN TEACHERS COLLEGE,
AND FROSTBURG STATE TEACHERS COLLEGE

The reasons why your Commission recommends abandonment of Princess Anne College, Coppin Teachers College, and Frostburg Teachers College have already been given. As to St. Mary's Female Seminary, it seems to your Commission that the findings of our survey staff permit of but one conclusion. Apart from sentiment, there can be no sound reason for continuing the existence of this institution. As a memorial to the founders of the state, it is unduly costly; its inaccessible location, small size, and lack of accredited status make it unfit for inclusion in a well-integrated system of institutions of higher education. To bring St. Mary's Female Seminary up to standard would increase the cost per student, already abnormally high, and would, in our opinion, be an unjustifiable expenditure of public money.

9. AN ADEQUATE SALARY SCALE

Your Commission has been impressed with the facts developed in chapter v of the survey report relating to the salaries paid to the faculties of the various state-controlled institutions. It is surprising to us to learn that the state teachers colleges surpass the University of Maryland in the average level of faculty salaries. At the same time, the salaries paid at the state teachers colleges are apparently well below those paid in other similar institutions elsewhere. Furthermore, even though the salaries paid by the University of Maryland are well below the level paid elsewhere, they are well above the salaries paid at Morgan State College. We are frankly shocked to learn that half of the salaries paid to members of the faculty of Morgan State College are less than \$2,250 and that the maximum salary paid is \$3,350, or less than one-half the maximum salary paid at the University of Maryland. In this connection it is significant that the maximum salary paid by the University of Maryland is far below the level paid in many of the better institutions

of the country so that it is virtually impossible to avoid loss of those on whom the scholarly reputation of the university most depends.

10. A FUTURE BUILDING PROGRAM

It will, we think, be obvious that any building program must depend upon the general program which the state is to follow. Since, in many respects, your Commission has felt obliged to leave for future determination important questions affecting the future program of the state in the field of higher education, any recommendations which we make for a building program must be qualified accordingly. We have thought it appropriate, however, to take advantage of the presence on our survey staff of experts in this field to have a study made of the physical facilities of the institutions now owned and operated by the state. Such a study has been made and the findings of our survey staff will be found in chapter vi of the survey report. These findings include a list of needs prepared in their order of priority. Your Commission offers this list for what it is worth.

XIII. THE RELATION BETWEEN THE STATE AND THE INSTITUTIONS WHICH IT SUPPORTS

Aside from state-owned and operated institutions which receive the bulk of state funds, the taxpayers are presently contributing more than \$300,000 a year to institutions which are privately owned and controlled. This includes \$60,000 for Washington College which, as we have noted, is partially controlled by the state.

These private institutions furnish the state a partial return for the funds contributed to them by making scholarships available to a number of students, but, as the report of our survey staff shows, the cost of these scholarships, except in the case of Western Maryland College, is considerably less than the amount appropriated. These concealed subsidies, for that is what they are, carry no strings attached to them. They are outright gifts which the institutions can spend without accounting to any state agency for the manner in which they are spent. By contrast, the expenditures of state-owned institutions, including the University of Maryland and Morgan State College, are subjected to the most detailed control. Every substantial purchase made by these institutions must be routed through the State Purchasing Bureau; the salary of every member of the faculty must be approved in detail by the Board of Public Works; clerical and administrative positions must be filled and salaries paid in accordance with regulations established by the State Employment Commissioner and the State Standards Salary Board; and every penny of expenditure is subject to state audit.

Your Commission believes that it is impossible to make sense out of the conflicting policies which the state is now following in relation to the educational institutions which benefit from state appropriations. If it is a wise policy to give large sums to the School of Engineering at Johns Hopkins University to be spent without supervision or control by any state agency, then why is it necessary to enmesh the College of Engineering at College Park in the web of

bureaucratic control set up for the administrative departments of the state government? This points, it seems to us, to an even more fundamental question: is it sound policy for this state to continue to appropriate funds to institutions over which it exercises no control?

In discussing our proposal for the development of a sound program of scholarships, we have recommended the repeal of all legislation under which state aid is now being given to private institutions. If the payments being made to any particular institution do not exceed the cost of educating the scholarship students, no loss would result from such a repeal. Western Maryland College is a case in point. The President of the College informs us that the state appropriation does not cover the actual cost of educating those students who have state scholarships. On the other hand, the repeal of existing legislation will deprive Johns Hopkins University of an annual subsidy which may be in the neighborhood of \$79,000, St. John's College of an annual subsidy estimated to be in the neighborhood of \$32,000, and Washington College of an annual subsidy estimated to be in the neighborhood of \$28,500.

We have already recommended that Washington College be taken over by the state. This would impose on the state, as a direct charge, the liability to make up the difference between the revenues and operating costs of that institution exactly as in the case of the University of Maryland or Morgan State College.

The case of St. John's College is more difficult. Aside from all other considerations, the unique character of the program of this institution and its radical departure from accepted norms would make us hesitate long before recommending its operation as a state-controlled institution. In any event, we have no reason to think that such a solution would be acceptable to the governing board of the College. Here the issue must be faced whether to continue state aid and, if so, upon what terms. Your Commission recommends that state aid be discontinued. We think that the very small number of Maryland boys who are attending St. John's Col-

lege, the very high cost of operation, and the complete lack of national accreditation furnish convincing arguments in favor of this course. Whatever may be the merits of the St. John's program, it is benefiting only a handful of our citizens. We think that the state has gone as far as can reasonably be expected in support of so esoteric an activity.

There remains for consideration the School of Engineering at Johns Hopkins University. While, as we have seen, this school is regarded by the University as an agency of the state, the fact is that the state exercises no control whatsoever over its activities. This is illustrated by the inability of your Commission's survey staff to obtain pertinent financial information for the purposes of their survey. Thus, we must face the fundamental question upon which the legislature has asked our views, namely, what should be the relation between the several higher educational institutions receiving state funds and the state?

Your Commission is strongly of the opinion that as a matter of general principle, state funds should be appropriated only to institutions that are under state control. We recognize, however, that there may be exceptional circumstances which justify a departure from that principle. Where an exception to the general rule is justified, it is our view that protection of the state demands as a minimum requirement that fiscal controls be established substantially similar to those applicable to state-controlled institutions. Accordingly, your Commission has heretofore recommended that any continued support beyond the biennium 1947-49 to the School of Engineering at Johns Hopkins University be conditioned upon the establishment of an arrangement which will meet this minimum requirement.

The exact nature of this arrangement should, we think, be left for further study. There are a number of methods by which the desired result can be reached, some of which are described in the report of our survey staff. The important thing is to end the present anomalous situation whereby the trustees of The Johns Hopkins University, in whose choice the state plays no part, are free to spend state

money without any control or accounting, while, at the same time, the Board of Regents of the University of Maryland, who are chosen by the governor, are subject to the strictest regulation.

The possibility must be faced that the trustees of The Johns Hopkins University may refuse their cooperation in any plan of state supervision or control. If such a situation should arise, the state will have to face squarely the issue whether the practice of turning public funds over to private institutions without restriction should be permitted to continue. The increasing financial difficulties which all private educational institutions are facing underscore the importance of this issue. It may well be that the time is not far distant when many other private educational institutions will be looking to the state for financial help. It will be difficult to find a reason for discriminating between any of these institutions. In this connection we are not impressed with the argument that the history of the founding of the School of Engineering at Homewood imposes a special obligation on the state. We think that the state's obligation to continue support to the Engineering School at The Johns Hopkins University is no broader than its obligation to give similar support to any other private institution which is performing a useful service in the field of education.

We can readily understand why the trustees of The Johns Hopkins University might hesitate to involve any department of that institution in the mass of red tape which now surrounds the operation of state-controlled institutions. That objection can, it seems to us, be met by a change in the system of state control which is now in effect. Accordingly, your Commission has examined with some care the regulations now governing the operation of state institutions of higher education in an effort to determine whether they should be modified. We agree with the recommendation of our survey staff that substantial modifications are desirable.

There are certain fundamentals which we think must be observed. It seems to us that the governor, in preparing his budget, and the legislature, in passing upon it, are entitled

to the assurance that the amounts requested by any educational institution have been carefully sifted by its governing body. In our judgment, it is not enough that the governing body meet annually for a few days and approve the president's requests. Any institution requesting state funds should be able to show that a committee of its governing board is constantly in touch with the development of the program of the institution and with its financial requirements so that the recommendation of the board will carry with it the judgment of more than one man. The report of our survey staff shows only too clearly that this situation does not generally exist among the institutions of this state.

Secondly, it seems to us that some independent agency of the state should review the budget requests of the various state institutions and should be authorized to require a fully detailed explanation of the manner in which state appropriations are to be spent. The Board of Public Works which now performs this function seems to us to be ill-fitted for the job. What is needed is a body specializing in the problems of higher education with a full-time executive officer with power to take prompt action. Review by such a body would serve as a means of integrating the state's entire program in the field of education.

Your Commission is likewise of the opinion that a full accounting should be required of state funds expended by any institution. We think that the controls now maintained by the Office of the State Comptroller and the State Treasurer should be continued. We also agree with the view that the periodic publication of full reports of the manner in which its funds are spent should be required of every institution receiving an appropriation from the state. For this purpose the publication of an annual treasurer's report similar to that published by the University of Maryland for the fiscal year ending June 30, 1942, should be required. We understand that publication by the University of Maryland of such reports was suspended as a wartime economy. Now that the emergency has passed, we strongly recommend that the practice of publishing such reports be promptly resumed.

In addition, audit by state officials is, in our opinion, an essential safeguard.

Whether any further control should be imposed upon the activities of our state institutions of higher education is a question which we think should be left for future determination. For the reasons given in chapter iii of the report of our survey staff, we are satisfied that these institutions should be exempted from the operation of the laws governing state purchasing and employment. We think that the fact must be recognized that an educational institution differs fundamentally from an administrative department of the state government and that regulations properly applicable to the one need not necessarily apply to the other. On the other hand, it may well be that a body such as we have suggested in discussing the scholarship program, which would be expert in the problems of higher education could properly exercise a considerable measure of control over the purchasing and employment practices of all state-controlled institutions of higher education. The report of our survey staff has suggested that such a body might be authorized to act for the State Employment Commissioner and the State Purchasing Bureau. In this way adequate protection could be afforded to the state against extravagant purchasing or against violation of the principles of the merit system of employment.

Accordingly, if a permanent State Board of Higher Education is created, as is hereinafter suggested, your Commission recommends that there be vested in that body such authority over purchasing by all state-controlled institutions of higher education and over the employment of classified personnel by such institutions as is now vested in other independent state agencies.

XIV. A PERMANENT STATE BOARD OF HIGHER EDUCATION

Your Commission has saved until the last discussion of the recommendation which seems to us to be by all odds the most important which we have to make. It should be evident to anyone who has read what has gone before that we have been able to suggest solutions to only a few of the major problems which face the state in the field of higher education and that those solutions should not be regarded as final. To furnish answers to the unsolved questions and to re-examine periodically the answers previously made calls for the existence of a single permanent body with over-all authority similar to that conferred upon your Commission by the legislature.

Such a body could assist the State Board of Education and the Board of School Commissioners of Baltimore City in the development of a junior college program which would be properly related to the entire state system of higher education. It could mold a system of state scholarships, such as we have recommended, so as to meet the changing needs of the state and of its citizens. It would be the logical agency to conduct those special investigations in the field of medical education and teacher training which we have already mentioned as urgently needed. In short, it would be the agency for carrying out the program which we have previously outlined in this report, with such modifications as might, after further study, be found to be advisable in the light of changing conditions.

In addition, such a body would be the logical agency to possess the authority over institutions of higher education now exercised by other state agencies. It should have the responsibility for reviewing budget requests prior to their submission to the Director of the Budget. It should possess the authority now exercised by the Board of Public Works to require the presentation of detailed breakdowns of the manner in which the funds appropriated to the institutions of higher education are to be spent. It should have power to exercise such authority over purchases made by state-con-

trolled institutions of higher education and over the employment of classified personnel by such institutions as it may determine to be necessary for the protection of the interest of the state. In general, it should be charged with the duty of periodic review and integration of the programs of all of the institutions of higher education which are receiving support from the state. It should see to it that the policies of equal support of Negro and white institutions previously laid down in this report are observed. It should have authority to collect statistical information concerning privately controlled schools and institutions of higher education.

We suggest that this body be called the State Board of Higher Education. It should, we think, include among its membership the chairman of the State Board of Education, the chairman of the Board of Trustees of Johns Hopkins University, the chairman of the Board of Regents of the University of Maryland, the chairman of the Board of Visitors and Trustees of Washington College, and the chairman of the Board of Trustees of Morgan State College. A majority of the members of the board should be appointed by the governor, with the consent of the senate, from persons not connected with any institution of higher education receiving state aid, and the chairman of the board should be chosen from among these independent members. In the opinion of your Commission, at least one representative of the Negro race should at all times serve as a member of the board.

If such a board is to function usefully, it must have available to it at all times the services of a permanent full-time paid executive officer charged with responsibility for keeping the board informed of all problems which may arise in the field of higher education. This officer, who should be selected by the board, would be the head of the state system of higher education, just as the State Superintendent of Schools is the head of the state system of secondary and elementary education. The board should have full power to delegate to this officer authority to act on its behalf when the board is not in session. We suggest that this officer might appropriately be called the Chancellor of the State of Maryland.

The need for such an agency seems to your Commission to be beyond question. The task of post high school training, already spread among a number of institutions, may be even more widely distributed in future through the development of junior colleges. This will more than offset the possible consolidation or abandonment of existing agencies which may take place as the result of our recommendations or any recommendations which may be made hereafter. To permit the continued uncoordinated development and expansion of the work of these several agencies must, it seems to us, inevitably lead to waste of public money. Experience in other states, to which our survey staff has drawn attention in chapter viii of their report, shows that such a body can help greatly to bring it about that, at the least possible cost to the taxpayers, every Maryland boy and girl shall be assured of a chance to prepare for a useful and satisfying life.

XV. CONCLUSION

Your Commission is well aware that this report has dealt with a very large subject in a very summary manner. The field which we have had to cover in this report is so broad that we have been obliged to confine ourselves largely to the statement of conclusions. For this reason we particularly urge those interested in this subject to read with care the able and comprehensive report of our survey staff upon which our conclusions have been based.

While we have made every effort to suggest measures which might result in savings to the taxpayers, we fully realize that the program which we have recommended will necessarily involve an increased contribution by the state to its institutions of higher education. This we believe to be inescapable if the state is not to default on its obligation to its youth. Anyone who reads chapter iv of the report of our survey staff cannot escape the conclusion that this state has failed to make adequate provision for post secondary school training. This is a condition which reflects upon the good reputation of the state. In calling for its correction, we offer no apologies.

T. HOWARD DUCKETT

ARTHUR H. HAWKINS

JOHN M. McFALL

E. L. MILES

MRS. JOHN C. SHAW

HARVEY B. STONE

TALBOT T. SPEER

WILLIAM L. MARBURY, *Chairman*

XVI. MINORITY REPORT

SUBMITTED BY CARL MURPHY

With the exception of the question considered in this minority report, I am in substantial agreement with the foregoing report of the Commission.

The Commission, in its recommendations, has given full consideration to provisions for higher education of the colored citizens of the state at the undergraduate level.

It is apparent, however, that the majority report does not face squarely the problem of the graduate and professional education of the colored citizens of the state.

I do not agree that the state can afford to continue as permanent policy, the present unconstitutional provision for the out-of-state education of colored students at the graduate and professional level. Above all, the state itself must act in a lawful manner if respect for government is to be maintained.

I recommend, therefore, *that the present state scholarship plan for colored students be discontinued; and that colored students be accepted at the University of Maryland in those curriculums which are not offered at a state institution of higher education for colored students.*

As our survey staff report points out, "Only if the state otherwise provides what the courts will accept as true equivalence of opportunity, will the courts tolerate any exclusion of any race from any facility provided."

Thus the state cannot *lawfully* provide medical education, for example, for white students only.

The Supreme Court of the United States has further ruled that providing scholarships for out-of-state study does not relieve the state of the obligation of providing *within the state* equal educational facilities for the colored and white populations.

Our survey staff, consequently, points out that, "The present plan of providing out-of-state scholarships does not meet the requirements that have been laid down by the courts."

The survey staff reviews the two possible solutions to this problem in chapter viii of the preliminary draft of its report:

The most economical method of providing instruction in courses where the number of Negroes to be served is small would be to open up such facilities to Negroes in the University of Maryland.

This has already been done in the Law School of the University.

It is understood, furthermore, that Johns Hopkins University is willing to admit Negro students to its graduate courses; it has had no qualified applicants because its graduate program is limited to those desiring the doctor's degree, while Negroes in general want to take a master's degree.

The precedents that have already been set in the state suggest the possibility of providing specialized instruction for Negroes, where the groups to be served are small, at the University of Maryland. Whether this is in accord with social policies of the state is naturally for the state authorities to decide.

Further, if there is any substantial number of Negroes needing any professional or graduate curriculum, it should be developed and maintained at Morgan State College.

The only remaining alternative is to build up at one of the Negro college centers a complete program of graduate and professional instruction practically as extensive as that of the University of Maryland.

Morgan State College is the only institution which shows any possibility of any such development, and the creation of the necessary facilities for a complete offering of professional and graduate work would require many millions of capital outlay and annual maintenance budgets running well into seven figures.

The problem cannot be solved by creating makeshift arrangements involving substandard programs at the Negro institutions.

The state can be legally compelled to maintain curriculums for Negroes which are equal in extent and quality to those provided for white students.

It would be unfortunate for the state to be compelled by legal means to take steps to provide suitable facilities for Negro students.

The second alternative discussed above is clearly not really an alternative.

It is manifestly impossible for the state to maintain "separate and equal" courses of study in all fields for colored and white. The state could not maintain two equal medical schools, two dental schools, two aeronautical institutes, etc., even if it had the funds to do so, because the small number of colored students to be served would not permit effective operation of the program.

The only constitutional alternative is to admit colored and white students to the same curriculums at the University of Maryland. I believe that the state must now face this question and set its policy for the ensuing year.





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